



Improving Maternal and Child Health and Well-Being in CEE/CIS Through Strengthened Home Visiting and Outreach

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1 Background

The UNICEF Regional Office (UNICEF RO) for Central and Eastern Europe and Commonwealth of Independent States (CEE/CIS) is developing a regional strategy to articulate UNICEF's role in strengthening health systems for delivering better results for children inline with global commitments related to MDGs, UNICEF-specific contributions as outlined in the Mid-Term Strategic Plan, as well as the regional and country-specific priorities in implementing the Rights of the Child. A number of thematic reviews were conducted to inform the development of this strategy. Taking into consideration priorities for children in the CEE/CIS region and the areas of UNICEF's mandate and focus, one key area for in-depth review is the performance of a home-visiting service as an integral part of Primary Health Care (PHC), and alternative forms of outreach service provision focusing on maternal and child health.

From April 2010 to October 2010 the Canadian Public Health Association (CPHA) was supported by the UNICEF RO to conduct an *Assessment of Primary Health Care Home Visiting Systems and Other Outreach Programmes focusing on Maternal and Child Health in Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS) Countries and Options for Scaling-up*. Seven CEE/CIS countries were selected by the UNICEF RO for inclusion in the assessment: Kazakhstan, Kyrgyzstan, Moldova, Romania, Serbia, Turkey, and Uzbekistan.

The objectives of the assessment were to a) identify new and innovative models developed with the support of UNICEF and other partners, and recommend strategies within a health system perspective to expand the scope of home visiting, improve the quality of service scaling up; and b) provide an overview of the situation of the PHC home visiting systems and other outreach programs focusing on Maternal and Child Health (MCH) home-visiting systems in countries in CEE/CIS.

The assessment of MCH home visiting services was conducted using a World Health Organization (WHO) health system framework. Attention was also paid to assessing MCH home visiting and outreach service capacity to address MCH, child protection, early childhood development, family planning and reproductive health, as well as equity, particularly in relation to vulnerable and marginalized populations. This assessment also identifies enablers, challenges, and barriers to addressing quality improvement and scale up.

The methods used for this assessment consisted of a review of scientific and published literature including government policies, strategies, and reports from international organizations on MCH home visiting and outreach services. With thanks to the UNICEF Country Office Health and Nutrition Sections from the selected countries who provided the CPHA assessment team with grey literature including unpublished consultant reports and relevant internal UNICEF documents. In-country assessments were conducted in Kazakhstan, Kyrgyzstan, Moldova, Romania, Turkey, and Uzbekistan, which included site visits, key informant interviews and unstructured focus groups with mothers, nurses, and physicians. Appreciation goes to the UNICEF Country Offices for arranging the visits on

short notice and providing logistic and technical support to the assessors. This paper reviews the findings from the seven country assessments and examines strategies and options for strengthening PHC MCH home visiting services in CEE/CIS.

Limitations for this assessment include the short time available for the assessors and UNICEF Country Offices to prepare for the in-country site visits along with only five days in each selected country. The scope of the assignment was extensive and there was a condensed timeframe from May 2010 to October 2010 within which to conduct the 7 country assessments, desk reviews, literature review and complete all reports. Therefore, follow up will be needed to adapt the findings to the individual countries.

2 Global Perspectives on MCH Home Visiting Services

“Home visiting is not a single or uniform intervention – it is a mechanism for the delivery of a variety of interventions directed at different outcomes. Home-visiting programmes are diverse in their goals, target recipients, mode and timing of their delivery and their theory and content. They may provide parent training/education, psycho-social support to parents, infant stimulation, and infant and maternal health surveillance. The programmes may be provided by nurses, midwives or lay people within different professional bases. Home visiting may vary in when it begins, how long it lasts and how many times within this period it occurs. A programme may be provided to all families with a new baby, to families in disadvantaged circumstances, to parents or children with particular problems, or parents of children defined as ‘at risk’.” (Health and Development Agency, 2004)

The literature clearly demonstrates that investing in early MCH home-visiting services with new mothers and infants, particularly with those who are living in poverty and are marginalized, will lead to improved maternal, infant and child health, and well-being. Findings from the WHO Commission on the Social Determinants of Health have equally demonstrated the importance of early childhood development as a health equalizer (WHO, 2008). MCH home visiting has the potential for providing an innovative approach, especially for reaching vulnerable populations, and is a culturally-sensitive and cost-effective service delivery model to improve infant health outcomes consistent with the WHO model of PHC (Norr et al, 2003). MCH home visits provide a valuable entry point to assess a family's health and well being and provide necessary care and support. These visits also have proven positive physical, social, emotional, and mental health outcomes for mothers, children, and families. For example, issues that public health nurses address in partnership with families and other health care professionals include child poverty, domestic violence, single parent households, food insecurity, depression, and homelessness.

When community health nurses began their practice in the late 1800s in North America and the United Kingdom (UK), they focused primarily on the health of mothers, infants, and children by visiting them in their homes and at school. There was also a strong focus on socio-ecological health promotion and illness prevention during this time (Stamler and Yiu 2008). During the mid 1900s there was a shift in North America and the UK towards a more medical model that was oriented to physical and psychological outcomes (Estabrooks, 1998). The focus on prevention and social determinants of health deteriorated during this time and therefore, many marginalized and vulnerable mothers did not receive appropriate services. In the early 1990s in North America and the UK it was evident to many health care professionals that the medicalization of mothers and infants was not the best model to improve the health, development, and psychosocial well-being of mothers, children, and families. As a result, over the past 20 years there has been a shift to include social determinants of health as well as the needs of vulnerable and marginalized mothers. This led to the implementation of ‘targeted’

programs for new mothers who were at higher risk of poor health outcomes. Subsequently, there is now a significant amount of research conducted on the effectiveness of ‘targeted’ early home visiting programs with marginalized mothers and families. Based on the available evidence, many jurisdictions in high income countries have opted for a mix of universal and targeted services, whereby all mothers and newborns are offered a home visit and only those families in need of additional visits participate in an enhanced home-visiting program.

Positive health outcomes for mothers and infants are evident with targeted early home visits as indicated by the following research. Armstrong, Fraser, Dadds & Morris (1999) found a significant reduction in postpartum depression and an increase in maternal-infant secure attachment when home visits were conducted by nurses. Parents’ infant safety knowledge, mothers’ decision to breastfeed, and infant primary care visits increased (Hedges, Simmes, Martinez, Linder & Brown, 2005). Research by Izzo (2005) documents an increased ability to cope with stressful life events 15 years postpartum when visited by a nurse. Bashour et al (2008) found that exclusive breastfeeding increased with home visits by a nurse, and Eckenrode et al (2001) found a visit by a PHN reduced the risk of child maltreatment. Kitzman, Olds & Sidora (2000) assert that high risk mothers who received home visits by nurses had fewer pregnancies, had longer spacing between pregnancies, and required less aid and food stamps. Jack, DiCenso & Lohfeld (2005) found that nurses are able to develop positive interpersonal relationships with mothers and Aston et al (2006) concluded that early home visits support empowering relationships. Public health nurses specifically are able to create trust and a supportive climate (Jansson, Petersson & Uden, 2001).

There are effective evidence-based options for improving the quality and effectiveness of MCH home visiting and outreach services in CEE/CIS. However, there is insufficient evidence to guide policy on an “optimal” model of MCH home-visiting services for any country or jurisdiction in terms of the frequency and number of visits or the specific content of each visit or visiting program (Gagnon and Sandall 2007; Bryanton and Beck 2010). According to Gogi and Sachdev (2010), “no concrete recommendations can be formulated from the available evidence regarding the optimal timing of home visits and specific responsibilities of community health workers.” There is even less evidence to support “optimal” MCH home visiting for Low and Middle Income Countries (LMIC) that have moderate maternal and infant mortality rates and are focusing beyond child survival. These research gaps include a dearth of study in the following areas: i) the effectiveness of MCH home visiting in countries with lower neonatal mortality rates (e.g. 15 – 45 deaths per 1000 live births); ii) the relative efficacy of home visits of a certain number, and timing in countries with lower neonatal mortality rates; and iii) strategies for achieving high quality in programme settings (Gogia and Sachdev, 2010). These gaps in research on MCH home visiting are significant and need to be addressed to better inform policies on MCH home visiting in LMICs.

2.1 MCH Home Visiting Program Options

This section presents evidence-based examples of the three main options for MCH home visiting programs: universal, target, and blended.

The first option is universal MCH home visiting whereby all families irrespective of risk, psycho-social, or socio-economic status receive home visiting services. The National Maternal-Child Health Program in Cuba is an example of how universal MCH home visiting and outreach services can be developed and implemented to achieve positive maternal and child health outcomes.

The second option is a targeted MCH home visiting program, which is an MCH home visiting and outreach program designed for a specific population (e.g., new mothers of low socio-economic status), group (cultural or ethnic minority) or focused on specific issues (e.g., early childhood development, child protection, reproductive health and family planning, or immunization). The most well-known and established targeted MCH home visiting program is the 'Olds Model' or Nurse Family-Partnership.

The third option is a blended program of universal and targeted MCH home visiting services, which is considered optimal for countries focusing beyond maternal and child survival where the goals of the program are to improve maternal child health and well-being while at the same time focusing on health equity. An example of blended universal and targeted MCH home visiting is the Healthy Baby Healthy Children (HBHC) program implemented in the province of Ontario, Canada.

2.1.1 Universal Home Visiting - The National Maternal-Child Health Program, Cuba

The Cuban model of MCH home visiting was selected because Cuba outperforms almost all countries with similar national income on measures of education and MCH outcomes. The Cuban model of mixed institutional and family-centred early childhood development programs offers a promising example of flexible, highly effective, and relatively low-cost interventions. Policlinics provide a range of services including parent education, community mobilization and primary care. A multidisciplinary team works closely with ECD and primary school teachers. By the 1990s, the strategic goal was reached whereby a team of a family physician and a nurse lived on every block and provided care for 120 to 160 families. Presently there are 31,000 family physicians, with a total doctor-population ratio of 1:170. The role of the physician in the Cuban primary care system is to provide primary developmental health care for children, pregnant women, adults, families, schools, early education programs, and the community; and to carry out health promotion and education, disease prevention, diagnose diseases, and design annual health plans.

Established in 1970, the centralized Maternal-Child Health Program (*Programa Nacional de Atencion Materno-Infantil—PAMI*) has the main responsibility for assuring the health of women of child-bearing age and their children. Under PAMI's leadership, governmental sectors as well as community organizations work collaboratively to provide a supportive network of community-oriented services. The success of this approach can be evaluated against a series of key indicators. Cuba's statistical time series for infant mortality documents one of the most rapid declines ever recorded. Since 2002 Cuba has had the second lowest infant mortality in the Americas, 20% below the US rate for all ethnic groups and just below the rate for US whites. The PAMI program is based on approaches that are:

- multilevel/multisectoral,

- collaborative,
- prevention-focused,
- family-based,
- community oriented,
- non-institutional; and,
- evidence-based.

The Educate your Child (Educa a Tu Hijo) component of the Maternal-Child Health Program is for children up to age five and is delivered through home visits for the first two years and in informal community settings until children attend school. Seventy-one percent of all children under six years of age receive these services and the remaining 17% attend child care if their mothers are working. Special needs children are served through a multidisciplinary team in every municipality. These teams work with the policlinic staff and the family on diagnosis, early intervention, and support. The program is supported by a non-compulsory preschool education for children six months to five years through child care centres, home-based preschool education, and a school preparatory grade.

Three main strengths of the Cuban Maternal-Child Health program have been identified (Keon and Pepin, 2008). Firstly, the policlinics in Cuba provide **integrated**, prevention-oriented, locally relevant services to the residents where they live. By focusing on prevention and health promotion, population health gains are made, particularly for marginalized and disadvantage populations. Secondly, Cuba has placed a great emphasis on **science-based** decisions in MCH programs. There are comprehensive databases and systematic program evaluations, which are implemented and adapted according to ongoing gathering and evaluation of evidence. Thirdly, the Educate your Child program is successful because it uses an **intersectoral** approach implemented at the community level, which ensures shared responsibility and a focus on results (Keon and Pepin, 2008).

Other aspects of the Cuban model are more difficult to translate because of the specificity of the Cuban health care system. This type of comprehensive universal MCH program is supported by health system funding of roughly 16% of GDP (most LMICs fall below 5%). The Cuban government has taken a whole-of-government health-in-all-policies approach to population health resulting in a high level of health equity in the country. In 2008, the World Health Organization Commission on Social Determinants of Health identified Cuba as an example of “good health at low cost” achieved through policies that address the social determinants of health and are based on principles of equitable access and government control (WHO, 2008). This type of intersectoral collaboration requires a high degree of political leadership and coordination between different sectors and levels of government.

2.1.2 Targeted Home Visiting

The Nurse-Family Partnership is a program of prenatal and infancy home visiting for low-income, first-time mothers under 19 years of age and their families. The nurse-family partnership began in the United States and has expanded to Australia, Canada, Germany, and the Netherlands among other countries. The nurses begin visiting their clients as early on in pregnancy as possible, helping the

mother-to-be make informed decisions for herself and her baby. Nurses and mothers discuss a wide range of issues that affect prenatal health such as smoking cessation, healthy diets, and information on accessing proper healthcare professionals. Nurse-Family Partnership is an evidence-based community healthcare program that empowers low-income, first-time mothers to become confident parents and strong women by partnering them with nurse home visits. This trusted relationship instills a level of confidence in the first-time mothers that helps guide them and their children to successful futures. Public health nurses are the backbone of the Nurse-Family Partnership's success. Since the program's beginning, nurses have been instrumental in shaping and delivering this evidence-based, community health program. As a result of their specialized knowledge, the public health nurses who deliver the Nurse-Family Partnership program in their communities establish trusted relationships with young, at-risk mothers during home visits, providing guidance for the emotional, social, and physical challenges these first-time mothers face as they prepare to become parents. Studies of the Nurse-Family Partnership have demonstrated results in the following areas:

Better Pregnancy Outcomes: Among the improvements in pregnancy outcomes that have been observed in the randomized, controlled trials of the program are fewer hypertensive disorders of pregnancy, significantly improved diets for pregnant women, reduced smoking rates, and fewer closely-spaced subsequent pregnancies. Prenatal health problems and exposure to substances can compromise the health of the fetus, and especially the developing fetal brain. Prenatal tobacco exposure, for example, increases the risk of preterm delivery, low birth-weight, behavioural problems, and adolescent crime, and is substantially more prevalent in low-income than high-income women. Preterm delivery and low birth-weight, in turn, are the leading contributors to infant mortality. Among the outcomes observed through the randomized, controlled trials of the Nurse-Family Partnership is a decrease in prenatal cigarette smoking. The amount of time between pregnancies also has a strong effect on the health of children. Infants born within 27 months of their older siblings are more likely to die or to have health and developmental problems than are those born with larger intervals between births. In all three trials, nurse-visited women had longer intervals between the births of their first and second children due to better pregnancy planning (Olds, 1997).

Child Abuse and Neglect: In many countries in the CEE/CIS assessment, intentional and unintentional injury and accidents are leading causes of childhood morbidity and mortality. The Nurse-Family Partnership is most often cited as the most effective intervention to prevent child abuse and neglect, which contributes to childhood injury. Among the reduction in child abuse and neglect and injury outcomes that have been observed in at least two of the three randomized, controlled trials of the program are a reductions in child abuse and neglect and a reduction in health-care encounters for injuries (Olds, 2002b).

School Readiness: Mothers may have more difficulty caring well for their children because they suffer from symptoms of depression, limited intellectual functioning and diminished belief in their ability to manage their lives, and they are surrounded by social disadvantage. For these mothers research on the Nurse-Family Partnership shows that their nurse-visited children fare better in cognitive and language development, and score higher on achievement test scores in reading and

math than their control-group counterparts. Among the improvements in school readiness observed for children born to low-resource mothers in at least two of the three randomized, controlled trials of the program are improvements in language development and academic achievement test scores (Olds, 2007).

Mother's Life Course: The Nurse-Family Partnership improves maternal life course. Nurses help the mother to feel empowered to make sound choices about her education, workplace participation, partner relationships, and the timing of subsequent pregnancies that enable her to financially take better care of herself and her child. This, in turn, reduces spending on social and other government program costs. Among the improvements in low-income, unmarried mothers' economic self-sufficiency that have been observed in at least two of the three randomized, controlled trials of the program are a reduction in use of welfare and other government assistance, a greater employment for the mothers, an increase in father presence and partner stability, and fewer closely-spaced subsequent pregnancies (Olds, 1997).

2.1.3 Blended Home Visiting – Healthy Baby, Healthy Children, Canada

Healthy Babies, Healthy Children (HBHC) is an initiative of the Ministry of Children and Youth Services, of the province of Ontario, Canada and provides an evidence-based example of a blended universal and targeted MCH home visiting program. The HBHC prevention and early intervention initiative is designed to provide children a better start in life. A joint Ministry of Health and Long-Term Care (MOHLTC) and Ministry of Community and Social Services (MCSS) initiative under the direction of the Office of Integrated Services for Children is part of the Ontario government's investment strategy for children. HBHC demonstrates the government's commitment to developing an integrated system of effective services for vulnerable children. It is intended to augment and strengthen existing services for families and children. The Province of Ontario's vision for the HBHC initiative is that every child (prenatal to age six) in Ontario will be provided with opportunities to achieve his or her optimal potential and every child in Ontario will have access to effective integrated programs and services that support healthy child development. The goal of the postpartum component is twofold: that every mother and newborn in Ontario will be provided with the support they need to make a healthy adjustment in the first few weeks of life, and that all families will have access to parenting information and parenting support that is responsive to their needs.

The provincial program goals are to promote optimal physical, cognitive, communicative, and psychosocial development in children through a system of effective prevention and early intervention services for families. It is also to act as a catalyst for a coordinated, effective, integrated system of services and support for healthy child development and family well-being through the development of a network of service providers and participation in community-planning services. The HBHC is not a standalone program. It is designed to link and integrate with all other related initiatives, build on the success of other programs and services, and foster new partnerships with the volunteer, charitable, and business communities. Community integration is promoted through well baby drop-ins, liaison with community shelters, hospitals, and social protection services, links with health promotion

activities in the areas of breastfeeding, postpartum depression, and early child development as well as referrals to community resources.

The HBHC programs are designed and delivered by individual health units across the province of Ontario. In the City of Ottawa, the HBHC program is under the Community and Protective Services, Ottawa Public Health Branch, Family and Community Health Division. HBHC uses a community-wide planning and implementation process that involves all organizations and agencies that service families and children (prenatal to age six). It is designed to help ensure an effective system of assessment, prevention, and early intervention services that make the most effective use of available resources. It is a voluntary program that emphasizes early identification and prevention of problems and builds on the strengths of the families and community members.

The objectives for the City of Ottawa HBHC program are to:

- Increase the proportion of children at high-risk achieving appropriate developmental milestones.
- Increase access to, and use of needs-based services and support for children who are at risk of poor physical, cognitive, communicative, and psychosocial development and their families.
- Increase effective parenting ability in families at high-risk.
- Contribute to client-level service integration by supporting access and service co-ordination models so that services are provided in a seamless manner to children and their families.
- Contribute to system-level service integration by taking a leadership role in the coordination of needs-based service provisioning at the community level.

3 Assessment of MCH Home Visiting Services in CEE/CIS

The following section provides an overview of the MCH home visiting services and outreach programs in the CEE/CIS region including specific country-level observations from the in-country assessments. Strengths and weaknesses of the PHC MCH home visiting services are described in the context of current PHC systems in the CEE/CIS region based on the PHC elements of equity, access, quality and intersectoral action and social participation.

3.1 Overview of MCH Home Visiting and Outreach Services in CEE/CIS

The polyvalent patronage nursing service has a strong preventive function in almost all prevention programs of health care aimed at the community. It is the primary, immediate link between health and social systems, on the one hand, and the population on the other. It also establishes contact with other relevant services in a community, including humanitarian organizations and NGOs. The polyvalent patronage nursing service represents the application of the concept of Primary Health Care in practice, where special attention is given to the significant influence of community in preserving and maintaining health and as well the negative impact community factors can have on health. (CPHA, 2005)

Countries of the Soviet Union and many of the CEE countries have well-established MCH home visiting services dating from the early part of the 20th century (Bamford and Mitchell, 1976). Over time the role of MCH home visiting in the CEE/CIS region has evolved, influenced by various factors such as changes in ideology, political regimes, health reforms, and regional and global financial crises. MCH home visiting services during the communist period were funded completely through the state budget and characterized by a strong focus on disease prevention based on screening and immunization programs. Antenatal home visits were usually conducted by patronage nurses who assessed the general physical and hygienic conditions of the home (Bamford and Mitchell, 1976). In many cases, pregnant women, especially women who were primipara had access to prenatal courses that focused on the physical and psychological preparation for child birth. Post natal home visiting focused on prevention services. Early childhood development programs were usually readily accessible through standardized Ministry of Health run pre-school programs for children up to three years of age, and were available to most children throughout the Soviet Union. Despite the emphasis on prevention and early childhood education, MCH home visiting services also re-enforced a model of state care, whereby the state rather than the individual or family had the primary responsibility for health. A disease-oriented focus and lack of scientific basis for MCH home visiting interventions contributed to the over diagnosis, medicalization of developmental issues, and institutionalization of infants and children with developmental delays, behavioral, or psychosocial issues. As one observer of the Soviet maternal and child health services explained, the health care regimens for infants and children likely had an “empirical rather than a proven scientific basis” (Bamford and Mitchell, 1976).

Maternal and child health began deteriorating in the CEE/CIS region prior to post-communist transition due in large part to diminishing resources available to MCH services. Deterioration of MCH services was exacerbated as a result of transition in the early 1990s as attempts to secure funding for health supports such as family planning, child development, and nutrition were largely unsuccessful in the context of reduced health care budgets (Baranov, 1991). Over the past 20 years the region has been witness to a diminished role for patronage nurses with the PHC system and a concurrent deteriorating quality of nursing education and number of educational opportunities, particularly when compared to their physician counterparts. Midwives and nurses have fairly low pay and often bear the costs associated with MCH home visiting, particularly transportation. Decreasing attention to disease prevention and lack of focus on health promotion has resulted in an orientation of MCH home visiting services of the CEE/CIS region toward medical care, focusing on the delivery of health care services at the individual level.

There are common characteristics of current PHC MCH home visiting services delivered in the countries of Kazakhstan, Kyrgyzstan, Moldova, Romania, Serbia, Turkey, and Uzbekistan. MCH home visiting services in CEE/CIS countries assessed are guaranteed as part of the universal basic package of PHC services. While coverage is generally good, the MCH home visiting policies and guidelines that guide MCH home visiting have not kept up with the body of evidence on effective practices and are in many cases outdated and impractical. Services are mostly static, delivered within a PHC setting, and conducted in strict adherence to national protocols. Evidence-based PHC MCH home visiting services and quality improvement mechanisms in CEE/CIS are largely non-existent as performance measures are focused on quantity rather than quality of visits. Few mechanisms exist within the PHC MCH home visiting services in CEE/CIS to address vulnerable and at-risk populations, or to adequately support child protection, early childhood development, or reproductive health and family planning. Without adequate guidance and professional capacities, MCH home visiting practices have been largely limited to well baby physical examinations and identification of mostly physical health-related issues. At the same time, the reduction in early childhood education opportunities as a result of significant under-resourcing or dismantling of many pre-school programs has resulted in increased demand on MCH home visiting services in CEE/CIS countries to support early childhood development. Equally, in the absence of effective child protection services, patronage nurses often have to deal with issues of child abuse and neglect, though they are largely ill-equipped to do so. The result continues to be over-medicalization and institutionalization as MCH home visiting services lack capacity to address psycho-social and child development issues.

Post-transition evolution of MCH home visiting in the assessed CEE/CIS countries has followed two main trajectories. In the first group are those countries that have not experienced significant changes in the approach to MCH home visiting services. Included in this category are the Central Asian countries of Kazakhstan, Kyrgyzstan, and Uzbekistan. The second group includes the CEE/SEE countries, which within the PHC reforms have substantially reoriented home-visiting services. These countries include Moldova, Romania, Serbia, and Turkey. The following section describes the characteristics of these two country groupings along with specific country-level observations of MCH home visiting services and outreach programs.

3.1.1 Characteristics of MCH Home Visiting Services in Central Asia

Kazakhstan, Kyrgyzstan, and Uzbekistan have, for the most part, maintained a model of MCH home visiting that existed prior to post-communist transition as PHC reform and renewal attempts have not substantially changed PHC service delivery. In each of these countries MCH home visits are guided by national Ministry of Health protocols which dictate the timing and frequency of visits. Table 1 is an example of the November 22, 2007 Protocol “On Improvement of Young Child Health Prevention Measures in the Republic of Kazakhstan” post natal home visit schedule for well babies (0 – 3 years). Similar examples exist in both Kyrgyzstan and Uzbekistan.

Table 1 Post natal home visit schedule for well babies (0 – 3 years)

0 – 1 month	# of home visits	
	physician / physician's assistant	nurse/ paraprofessional
The first three days after discharge from maternity hospital	1 – home visit by physician and nurse	
7 th day of life	-	1
14 th day of life	1	-
21 st day of life	-	1
28 th day of life	-	1
1 st month	1 visit to policlinics	
Total number of home visits	5	

6 to 12 months	# of home visits	
	physician / physician's assistant	nurse/ paraprofessional
7 months	1 visit to policlinic	1
8 months	1 visit to policlinic	1
9 months	1 visit to policlinic	1
10 months	1 visit to policlinic	1
11 months	1 visit to policlinic	1
12 months	1 visit to policlinic	1
Total number of home visits	6	

12 to 24 months	# of home visits	
	physician / physician's assistant	nurse/ paraprofessional
1 year 3 months	1 visit to policlinics	1
1 year 6 months	1 visit to policlinics	1
1 year 9 months	1 visit to policlinics	1
2 years	1 visit to policlinics	1
Total number of home visits	4	

24 to 36 months	# of home visits	
	physician / physician's assistant	nurse/ paraprofessional
2 years 6 months	1 visit to policlinics	1 home visit
3 years	1 visit to policlinics	1 home visit
Total number of home visits	2	

Performance is based on the compliance with the national protocols and enforced through a structure of negative incentives. MCH home visiting service delivery settings are most commonly maternity hospitals for antenatal visits from midwives and policlinics for post natal visits from nurses. Children's policlinics exist in more densely populated areas. In more rural and remote areas, Feldscher Accoucher Points or rural policlinics provide a full range of basic primary health care services, including home visits.

Based on the assessment of MCH home visits in these three Central Asian countries, home visiting is characterized by universality with a high quantity of low quality, unstructured visits conducted in strict accordance with the national protocol. A disease focus of care persists, there is a strong focus on child survival, and support for maternal and child health and well being is very limited, which continues to lead to over-medicalization and institutionalization for mothers, infants, and children. Early childhood development, child protection, and reproductive health and family planning services are largely absent from these MCH home visiting services. Equity in relation to appropriately addressing the needs of vulnerable, marginalized, or populations at risk through MCH home visiting remains largely unaddressed. Midwives or patronage nurses provide well mother and baby visits and gynaecologists and pediatricians provide initial well mother and baby visits or conduct home visits when medical issues arise. Currently, midwives and nurses appear to have limited or no opportunities for continuing medical education and also lack professional guidance on content of visits.

Internationally funded MCH initiatives seem to prioritize training physicians over midwives and nurses. Quality improvement measures have not been integrated into MCH home visiting protocols. Dedicated MCH funding does not exist as resources for MCH home visits are covered by funding for the guaranteed package of basic PHC services. Information, education, and communication materials are in short supply as are age and culturally-appropriate materials for parents and children. Below is a description of the specific MCH home visiting services in Kazakhstan, Kyrgyzstan and Uzbekistan including examples of innovations and better practice programs.

Kazakhstan

Kazakhstan revised the national protocol on MCH home visiting in 2007. As part of this revised national protocol, Healthy Baby Rooms were established in each children's policlinic. As a result, these policlinics have significantly increased access of mothers and children to early childhood development resources including age appropriate toys and IEC materials. Paediatricians and nurses in Healthy Baby Rooms also provide individual information on breastfeeding, supplementary feeding (timing,

amount, nutrition and safety), ability to identify danger symptoms of disease, and feeding and drinking schedules for a sick child. However, improvement in knowledge of practitioners and families in early childhood care and development has been largely limited to those areas which have received additional training such as South Kazakhstan Oblast which is implementing a Care for Development project (Engle, 2009). Without an implementation plan for the protocol, there is little evidence to suggest measurable quality improvements in MCH home visiting services. Moreover, it appears that compliance rather than quality continues to be the main performance measure. According to key informants in South Kazakhstan Oblast, certain jurisdictions in Kazakhstan with particularly high birth rates reveal that the number of nurses per women of reproductive age appears to be less than sufficient to meet the requirements of the protocol. Midwives and nurses report making client contacts by phone in lieu of home visits. Content of visits is also an issue as nurses reported not knowing what information to give well mothers and babies at low risk after the first or second visit. Issues of equity have not yet been addressed in MCH home visiting services in Kazakhstan although there appears to be provisions in the protocol for increased services to populations at risk. Intersectoral collaboration, integration of health care services, interdisciplinary cooperation and community engagement are areas where improvements are necessary to strengthen MCH home services.

Kazakhstan - The Better Parenting Program South Kazakhstan Oblast

Standardized programs such as UNICEF/WHO Care for Development component have been introduced in many countries of the CEE/CIS region including Kazakhstan. The program is designed to improve the knowledge, behaviour, and practices of health care professionals and parents and has shown encouraging results in the CIS region (Engle, 2009). One of the apparent limitations of Care for Development projects is the lack of attention paid to strengthening the PHC system and MCH home visiting services as demonstrated by the absence of clearly articulated PHC system strengthening objectives or outcomes in Care for Development initiatives. Moreover, like many other externally driven MCH initiatives, Care for Development has been largely implemented on a project basis, donor-dependent, and time-restricted. As a result, program sustainability has been dependent on continued donor engagement and potential for scale up has been constrained to some degree.

The Care for Development Better Parenting Program implemented in South Kazakhstan Oblast was designed to improve the knowledge and skills of parents and communities in early childhood care that ensures survival, growth, and development. The program objectives are:

- Training medical workers to provide health care and developmental services for children at an early age (from newborn to 36 months of age).
- Promoting UNICEF and WHO principles among Kazakhstan's parents and families, local authorities and other donors.
- Designing educational materials and a training module.
- Developing communication materials for promoting the project in pilot regions.
- Improving parenting skills through parent training.
- Enhancing maternal health and child survival and development.

The program training objectives are:

- Identifying major tasks of a visiting nurse in counselling families on safety, good health, growth, and psychosocial development of their children under three years of age.
- Counselling families on infant feeding and care for cognitive and social development of young children.
- Counselling families on how to care for their sick children at home.
- Counselling families on how to care for nutrition of pregnant and breastfeeding women.

Based on formative and outcome evaluations of the program, the Better Parenting Program has been successful in achieving its objectives (Vargas Baron, 2006; Engle, 2009). Strengths of the program include the use of excellent baseline data including a child rearing study conducted in 2002,; high quality professional training materials,; emphasis on paternal involvement,; willingness to adapt the program based on lessons learned,; sustainable short- and medium- term results in terms of increased practitioner and parental knowledge,; and ongoing monitoring of program implementation using qualitative and quantitative data and quality improvement measures introduced at the individual practitioner level. In many instances the Better Parenting Program and other Care For Development initiatives are the only training opportunity available to nurses to enhance basic knowledge and skills. Successful program outcomes are improved health care practitioner and parent knowledge related to a set of infant health and development measures.

Program design did not include MCH home visiting and outreach services strengthening or equity-based objectives, which has likely limited both the impact and sustainability of the initiative. To address the issue of MCH home visiting service strengthening and equity, the Better Parenting Program would benefit from improved program design including program objectives, sub-objectives and results, health service indicators, measures and targets for child and parental health and well-being outcomes; strengthening of child development, sanitation, rights, and protection content; design of complete program structure, institutional and managerial roles, responsibilities and terms of reference; design of an expanded materials development strategy including ethnic and other vulnerable groups; development of a guide for conducting home visits and healthy baby visits; and cost projections (Vargas Baron, 2006). Moreover, the program remains fairly dependent on external support for funding and resources. Improved program design would not only increase the potential for sustainability but would facilitate bringing the program to national scale.

Kyrgyzstan

As of September 2011, Kyrgyzstan was in the process of revising the national MCH home visiting protocol. As the case of Kazakhstan has shown, the ability of the revised national protocol to improve the quality of MCH home visits will be contingent on the development of a strong implementation plan. Even with a strong implementation plan, quality improvements for MCH home visiting in Kyrgyzstan are constrained by several systemic issues.

According to key informants working at different levels within the primary care system in Kyrgyzstan, a critical lack of nurses, as a result of low pay and outmigration, has resulted in significant understaffing of PHC institutions particularly in more rural and remote locations. Incentive structures for staff retention and for deployment to rural and remote locations have proven largely unsuccessful to date. While nurses report meeting the number of visits in the protocol, mothers report not receiving antenatal or well baby home visits. It is therefore unlikely that there is consistent compliance with the protocol in terms of quantity of visits. As in other countries, the capacity of MCH home visiting services to address issues of child protection, early childhood development, and family planning and reproductive health are very limited. Practitioners lack basic reference materials, age and culturally appropriate books and supplies such as scales and measuring tape. UNICEF, through the Gulazik program, has developed a series of infant care and early childhood development material for health care professionals and parents which have greatly increased the availability of knowledge resources in the Talas Oblast. While intersectoral cooperation is similarly limited to the other Central Asian countries, a more democratic society allows increased space for meaningful community engagement in MCH outreach activities as exemplified by the Village Health Committees and Gulazik program as described in the following case study.

Kyrgyzstan Case Study – Village Health Committees

The VHCs were established in 2002 by the Kyrgyz-Swiss-Swedish-Health Project. A VHC is a volunteer local committee that identifies and takes action on public health issues important to the specific community. Public health issues are identified through participatory community needs assessments. By the beginning of 2010, 1,400 VHCs had been established covering 85% of the villages and about half of the population. Full coverage is not anticipated as the VHCs do not exist in town and urban centres. Total coverage for all villages is expected by 2011. The individual VHCs form a Rayon Health Committee that is a legally registered, regularly scheduled entity meeting to exchange information, plan, and monitor joint activities.

The Ministry of Health established the Republican Health Promotion Centre (state level) and Health Promotion Units (located in Rayon Polyclinics) providing one full-time position per 20,000 population served for a total of 100 Health Promotion Unit staff in Kyrgyzstan. The Republican Health Promotion Centre coordinates the work of the Health Promotion Units and work with outside partners. The role of the Health Promotion Units is to provide organizational development to help VHCs become independent, civil society organizations and to train them on health action and the collection of monitoring data. The VHCs conduct health actions based on community needs assessment that establish a baseline of diseases ranked by burden, frequency, and health determinants. Currently MCH is one of the 10 priority areas for the VHCs. The FGP/FAP staff is trained in community needs assessment and are very involved in the initial phases of the health action. The VHCs conduct the health action with the support of the local polyclinics and Health Promotion Units, to varying degrees, depending on the intervention. A monitoring and evaluation plan is developed for each health action (Schueth, 2009) and results are reviewed regularly.

The VHCs have contributed a great deal to strengthen public health in Kyrgyzstan by improving health outcomes, health literacy, and community participation. They have also strengthened the health care system by providing some measure of surveillance, for instance the early identification of women who are pregnant; improving the health information system; and improving management capacity. As with most donor-driven programs, financial sustainability is a challenge and particularly acute as Kyrgyz-Swiss-Swedish-Health Project begins its disengagement after almost 10 years. Strategies to address financial sustainability include the creation of NGOs out the VHCs allowing the VHCs to independently apply for their own funding. Also, there is some thinking that a very small budget could be provided by the government to allow the continuation of VHC activities. Many donors have engaged the VHCs to support their projects or programs, notably the Gulazik (Sprinkles Micronutrients) program in Talas Oblast, which is currently a very successful UNICEF initiative conducted in partnership with government and several other international donors. The success of Gulazik was not only in the engagement of multiple partners and stakeholders, but in a comprehensive public health approach that included social marketing, primary health care system strengthening, community engagement, and intersectoral cooperation.

Uzbekistan

Through two Presidential Decrees in 2009, Uzbekistan created a mechanism for intersectoral and inter-agency collaboration in specific areas targeted to improving MCH and well-being. At the community level the Decrees called for increased cooperation between the PHC institutions, the Women's Committees, and local governing councils called Mukhallas. The Women's Committee is a national organization created in 1991 by the State to carry out activities related to women's social and professional protection; reproductive rights, reproductive health, demography and environmental protection; women's employment, developing small and medium-sized businesses among women; the development of women's movements; and, the integration of the Uzbek women's movements into international arenas. The Women's Committee has national, Oblast and Rayon representation throughout Uzbekistan. The Mukhalla Foundation was created in 1992 and is structured similarly to the Women's Committee. The aim of the Makhalla Foundation is social, economic, and cultural improvement of Makhalla and the inhabitants of Makhalla, to enhance national tradition and customs, and to manage, develop, and improve the work of local, self-governing Makhalla organizations. One of their tasks is to provide financial and spiritual support for people with disabilities, orphans, elderly, and single persons. As per the Presidential Decrees of 2009, the Women's Committees and Makhallas are tasked to collaborate on strengthening maternal and child health including providing relevant health education and facilitating access to PHC for women of reproductive age (15 – 45). These activities are delivered together with PHC centres. The partnership between the PHC Centres including MCH home visiting nurses, the Women's Committee, and the Mukhallas appears to be fairly well established but the overall impact of this centralized strategy for community mobilization to improve MCH and well-being has yet to be determined.

Uzbekistan is one of the few countries where a nursing shortage is not a major problem. As a result of a massive recruitment campaign the country has approximately 108,000 MCH home visiting nurses.

These MCH home visiting nurses have filled an important gap, especially in access to services for rural and remote populations. A trend toward over visiting well beyond what is called for in the protocol was observed in one rural area and is likely characteristic of other jurisdictions. There was a very high quantity of unstructured MCH home visits (up to one per day in one case). In discussions with urban PHC centres such as Tashkent it appears that the MCH home visiting midwives and nurses face similar personnel and time constraints as other jurisdiction and often do not conduct well mother and baby visits as mandated. Child protection and early childhood development require improvement in the MCH home visiting services of Uzbekistan. In rural settings child protection and early childhood development are supported by the Women's Committee and Mukhalla though no formal case management or task sharing structure seems to exist. Family planning and reproductive health services have received a lot of attention and at least in the model rural policlinics visited, contraceptives seem readily available. However, the MCH home visitors' role in supporting access to these reproductive health and family planning services was unclear. Each of the MCH patronage nurses was supposed to receive a supply of essential medical products purchased by the Asian Development Bank but these were held up at the boarder and only the pilot sites visited had these supplies.

Uzbekistan is one of the few countries working on comprehensive guidelines for patronage nursing. The Health-2 Project (World Bank) and Woman and Child Health Development Project (ADB) are developing 102 separate guidelines for patronage nurses of which four have been approved by the MoH to date. Among the new guidelines are approximately 19 non-disease specific maternal and child health and well-being guidelines including modules on domestic violence, child protection, and early childhood development. Prior to adoption each of the 102 protocols will be rigorously pilot tested. The patronage nursing guideline development is a partnership between the Uzbek Nurse Association responsible for developing and testing and with GTZ and the consulting firm EPOS which are providing technical assistance and working with the Faculties of Medicine to integrate the guidelines into nursing curricula. However, there is some resistance by faculty to integrate these guidelines into the nursing curriculum. How these guidelines will be implemented outside of the Faculties of Medicine and integrated into MCH will also need to be determined.

3.1.2 Characteristics of MCH Home Visiting Services in Renewed PHC Systems

Four of the countries assessed have undergone significant PHC reform in the past decade. PHC reform and renewal in Moldova, Romania, Serbia, and Turkey have had lasting impacts on how the MCH home visiting services are delivered. At the same time, there is little evidence examining direct impact of PHC reform and renewal on the effectiveness of MCH home visiting and outreach services in these countries.

Moldova

Case study

Svetlana, a 38-year old mother of four children, lives in a small village in central Moldova. She has two adolescent children, a two-year old, and she has recently delivered an infant boy. A site visit to the local polyclinic resulted in being invited to attend a typical home visit to this new mother and her seven-day old infant. The observations of the site reviewer are as follows:

- The doctor made the home visit spending his time with the father outside while they completed “forms”.
- The doctor brought no equipment, bag, or other items with him; only a file.
- The doctor did not speak to the mother or examine her or the infant.
- The mother appeared to be managing the infant’s care, and breastfeeding was well established.
- The infant was tightly swaddled and wrapped around a stiff board resulting in no skin-to-skin contact.
- The mother was provided with vitamins and a card of some kind when we left.

(Assessor Observation, Moldova, May 2010)

Moldova introduced family medicine starting with reforms in 1997 and in a second stage of reforms strengthened mechanisms for decentralization and intersectoral coordination as part of the National Health Policy introduced in 2007. One of the key challenges in implementing reforms is the need to better clarify the roles and relationships between different actors at different levels in the new decentralized health system. Moldova has concentrated efforts on improving child and family protection through a 2003 national strategy and a 2006 child care reform. Considerable attention has been given to deinstitutionalization of children and reuniting them with their families; however, resources including MCH home visiting to support families in this area is very limited and there is considerable need for parent education, behavioural strategies for families dealing with difficult children in a community setting, and concrete supports for children with developmental needs.

Interdisciplinary work, although nascent, is developing in Moldova. The family doctor and nurse are responsible for coordinating home visiting services. For vulnerable families or cases where there are social or child protection issues, the community social assistant is engaged, though coordination efforts have been hampered by weak case management. Moreover, there are few social workers and their work has thus far been limited to social assistance. Intersectoral collaboration between health and social services exists for the identification of the persons most at risk and includes task sharing, management, and monitoring. The aim of social services relating to maternal and child health and well-being is demedicalization and deinstitutionalization by reducing reliance on health services and increasing access to community services. As child health services, child protection, and early childhood education services are often fragmented, the need for coordinating the efforts of several ministries (Ministry of Health, Ministry of Social Protection, and Ministry of Education) and other institutions involved in child welfare was recognized by the Government of Moldova. A National Council for Child Rights Protection was established under the authority of the Prime Minister and the High Level Group for

Children, reporting to the Vice Prime Minister. There is a further need to clarify responsibilities of each of the Ministries and bodies involved in maternal and child health and well-being in order to strengthen service delivery models such as home visiting to support child protection. Moldova is also focused on reconceptualizing MCH based on a family-centred model of care that strengthens the mother-infant-father relationship. While PHC MCH home visiting services lack capacity at this point to fully support a family-centred model of care, programs such as the Children Community Family described in the following case study is a promising practice example of a family-centred MCH program in Moldova.

Moldova Case Study - Child Community Family Fantastic "CeCeFal" Centre

The "Fantastic-CeCeFel" Centre was created under the Department of Child Protection with financial support from Child Community Family Kinderhilfswerk and is an example of a program that enhances equity by targeting services to vulnerable families. The Centre's goal is to enhance the relationship between parents, caretakers, and their children. Parents and other members of the family benefit from group or individual consultations, information from flyers, discussions, and magazines, and are encouraged to share their knowledge, skills, and experiences. Principles of social inclusion are enhanced through policies of non-discrimination based on sex, nationality, race, culture, religion, spoken language, or political orientation. As the program became more successful and demand exceeded capacity, disadvantaged families and those registered by social protection agencies were prioritized. The Center organizes daily play sessions with children aged between six months and seven years who are not included in a kindergarden programme. The "Fantastic-CeCeFel" Centre facilitates social inclusion by providing an enabling environment where children can learn and interact with their parents. The activities are based on a curriculum that was developed for different age stages comprising principles of child play and guidance on how to organize activities such as play, dance, singing, painting, modeling, activities for the development of the imagination, reading, and story-telling. Over the course of three-and-a-half years, the Centre has had over 3128 client contacts. The project was a three-year initiative beginning in 2006, and like many time-limited and donor-funded initiatives, the end of external project funding in 2009 has been challenging. However, as the Centre has been successful and meets a clear need in the community, it has received municipal support and outside financial and material assistance.

Moldovan Case Study – Early Childhood Care and Development

UNICEF supported an Early Childhood Care and Development initiative in partnership with the Moldovan government, other UN organizations, and NGOs. This initiative successfully addressed health system strengthening to support the psychosocial development of children in Moldova and provides an example of how to successfully introduce change through the health reform process. The objectives of this initiative were to:

- Promote cost-effective and efficient MCH services.
- Contribute to the development of an accessible, qualitative, and sustainable primary health care.

- Increase access to and improve the quality of early childhood development practices.

Results of the initiative include decreases in perinatal causes of death; improved perinatal and family outcomes; inclusion of parent education in the Basic Benefit Package of Health Services; capacity building for health care practitioners and improved practice in the area of early childhood development; and, improved relationships between parents and medical staff (Evans, Berdaga, and Jelamschi, 2006). The going beyond the “health only” approach resulted in the successful implementation of a multilevel and multisectoral effort that engaged relevant stakeholders in policy dialogue and program implementation to support early childhood development in Moldova.

Romania

Between 1989 and 1998, the health care system in Romania was decentralized. A second set of reforms in May 2006 orientated the Romanian Health Care system toward preventive care, primary health care, more effective emergency services, development of the private sector, increased decentralization, as well as the development of effective intersectoral cooperation between health and social protection. Further changes to enhance community-based health care and evidence-based planning of health care are currently being discussed. While the financial crisis and the political turmoil (e.g., four health Ministers together with top decision level teams changed over in the 18 months between 2008 and 2010) have slowed down the pace of reform, the decentralized project has continued rapidly with increased responsibilities downloaded onto municipal governments. PHC services have been reorganized from catchment areas allowing for individuals to choose their primary care physician.

Community and patronage nursing was lost in the process, as provisions were not included for community and home visiting nursing within the primary health care team. An initiative was piloted in 2002 to reintroduce community nursing to address the needs of the most vulnerable population. This initiative was led by the Ministry of Health in collaboration with the Institute of Mother and Child as part of the National Programme for Mother and Child Health. The initiative benefited from technical assistance from UNICEF, UNFPA, and USAID and was initially developed in 17 pilot counties. The pilot project resulted in a National Program for Community Nursing, which was passed in 2009 by the Romanian government. In this program community nurses provide outreach services to the community and form a link between health and social services. Community health nursing priorities in Romania are preventive health care services for children, mothers, as well as vulnerable populations. The objectives of the District Health Authorities in regard to community nursing programs administered by municipalities are to:

- Offer technical consultancy and assistance for needs assessment, establishing priorities, and methods of implementing and monitoring policies of integrated community medical assistance;
- Collaborate with authorities of the local public administration in order to realize county strategies and lists of priorities in the field of community medical assistance;

- Contribute to the creation of an organizational framework for the monitoring and evaluation of the national and local health services and programmes regarding community medical assistance;
- Monitor the elaboration of practice guides and standards in the field of community medical assistance;
- Ensure support for the training of the personnel working in the network of integrated community medical assistance, including the junctions with the family medicine network, access to medicine, ambulatory and hospital services;
- Identify, elaborate, and propose specific education programmes for health and for the adoption of a healthy lifestyle at the level of different communities;
- Elaborate and propose specific primary, secondary, and tertiary prevention and programmes and medical recovery and social inclusion;
- Identify, elaborate, and propose specific medico-social counselling programmes, home-care services for vulnerable persons: pregnant women, new-born, people with chronic illnesses, elderly, people with disabilities, uninsured, victims of domestic violence, children from disorganized families, people with mental health problems, or other persons identified at the local level as being in risk situations; and,
- Facilitate and monitor the creation of inter-institutional partnerships at different levels of common strategies and protocols for community assistance services.

As a result of decentralization, the distribution of community nurses is uneven. Community nurses are obtained by request from District Health Authorities to the Ministry of Health and some districts have prioritized community health nursing while others have not. As the program is the responsibility of district governments, their low level of preparedness together with the general low capacity of local governments to address health issues, has hindered effective implementation. Funds for the programme are channelled from the Ministry of Health to the local governments but are decreasing and are in jeopardy due to increasing financial pressures on the Romanian government. With significant investment and support the community health nursing program can be a highly effective MCH service delivery model but currently lags due to a lack of funding and planning capacity. Community health nursing in Romania will be at increasing risk if plans to download funding for these positions to the municipalities in 2011 are successful. While community health nursing, albeit not implemented uniformly, is a model for delivering MCH home visiting services that is responsive at the local level.

Romania Case Study - Roma Health Mediators¹

In 2002 the Ministry of Family and Health in Romania passed an ordinance officially creating the position of Roma Health mediator within the public health system. The program began as a partnership of NGOs and the Ministry of Health to train Roma Health mediators and which resulted in the development of well-defined job descriptions and Roma health mediators began their work. The goals of the program are to improve access of Roma to health promotion, prevention and PHC

¹ <http://www.anr.gov.ro/docs/programme/Roma%20in%20Document%207-%20Health%20Mediators%20Programme%20in%20Romania.pdf>

services; provide employment opportunities for Roma women in their communities; and tackle discrimination through emphasis on social participation, gender empowerment, and promotion of rights. Specific objectives include a focus on child and family health along with active community engagement in implementing national policies and programmes in the health field. Key activities of the Roma Health mediators have been the facilitation of patient doctor communication, navigating bureaucratic procedures and communicating with the Roma community. Strengths of the Roma Health mediator program are the comprehensive legislative framework and national leadership; proof of good practice; implemented within a comprehensive public health program; successful partnerships; and, a focus on social inclusion and combating stigma and discrimination. Some challenges persist such as the limited number of Roma mediators and need for scale up; lack of resources; misunderstanding of the role of health mediators in the Roma communities; limited monitoring and evaluation; and continued struggles with stigma and discrimination. The Roma Health mediator program has been successfully introduced in Serbia. As for Serbia in particular, the School of Public Health in Belgrade has now established two student positions at the masters level for Roma in order to enhance the Roma Health mediator program. As an MCH service delivery model the Roma Health mediators provide a comprehensive, culturally sensitive, community-based approach that has dramatically improved the equity focus on MCH services in these countries.

Serbia

The origins of patronage nursing in the West Balkan countries are found in the nursing schools established in the 1920s, where nurses were trained on clinical and community practice including health education and health promotion. Initially the patronage service model in the Western Balkans consisted of nurses who provided services to only one specific population group or to people with specific health condition, for example, visits to mother, infants, or patients with tuberculosis (monovalent patronage). As this model was eventually seen to be too costly by the communist regime, the concept of polyvalent patronage nursing was introduced and nurses were qualified to provide various home visiting services to different populations. The polyvalent patronage service in Serbia was officially formed in the late 1970s at the instruction of the Ministry of Health and introduced in all Dom Zdravlja. Education for nurses working with families and local communities was the responsibility of the Institute of Health Education of Serbia and regulated by the Ministry of Health.

As the legal regulations that defined the scope of practice and role of the patronage service within the health care system expired in the early 1990s, and without new regulations to take their place, the role of, and resources for the polyvalent nurse was much reduced within the primary care system in Serbia. This diminishing role for polyvalent patronage nurses was characterized by a drastic reduction in the number of visiting nurses; an aging patronage nursing workforce (a large number over 45 years old); uneven deployment of the visiting nurses throughout the country with large disparities in the number of inhabitants per nurse; frequently inadequate co-operation between the nurses and other departments within the Dom Zdravlja; and lack or absence of necessary equipment for fieldwork. Since the early 2000s in Serbia, there has been a gradual renewal of polyvalent nursing and MCH

home visiting led by numerous projects and programs supported by international donors (e.g., UNICEF, CIDA/CPHA). Collaboration between UNICEF-CPHA and the Institute of Public Health Belgrade produced one of the few MCH practice guidelines for community nurses: *Good Practice Guide for the Work of Polyvalent Visiting Nurses in the Family* (CPHA 2005). Serbia has experienced improvements in training and guidelines for patronage nurses and improved MCH outreach programs, including the very successful Halo Beba program in Belgrade. Improvements in MCH home visiting services have been facilitated by the strong leadership from the Institutes of Public Health, at both national and district levels in Serbia, which have taken a very active role in supporting and integrating donor-led programs in the area of MCH.

Serbia Case study - "Halo Beba" Serbia

The "Halo Beba" (HB) project began in 2002 at the Institute of Public Health (IPH) in Belgrade, with the support of UNICEF. For the last eight years, patronage nurses from Dom Zdravlja have been trained on home visiting for newborns and infants with full administrative and managerial support from the IPH in Belgrade. The unit works in three shifts throughout a 24-hour period, and trained nurses provide counselling free of charge over the telephone. Nurses are educated on IMCI, psychosocial support to the family, reproductive health, child protection, and telephone counselling.

From Belgrade's maternity hospitals, personal data (name, address, and contact telephone number) about discharged mothers with their newborns are sent to the HB program every day. After this data is received, nurses call mothers and introduce themselves, provide basic information about HB, and schedule a home visit for the next day. Nurses from HB send all relevant health information to the polyvalent patronage service in the relevant Dom Zdravlja. This process of data flow ensures the polyvalent patronage service in the Dom Zdravlja has accurate information for home visiting. Families are informed about the times to expect the scheduled home visits. The result has been significant improvement in coverage of newborns and mothers with home visits.

Nurses provide answers to families who call HB on child health. If needed, nurses call families to follow up. In some cases, nurses call polyvalent patronage service in Dom Zdravlja to request additional home visits or to make a referral to a paediatrician. As a result of phone counselling for mothers and families, the number of unnecessary visits to outpatient paediatric clinics and Dom Zdravlja has decreased. More than 100,000 calls from families were received in 2008, mainly from Belgrade, with 15% from outside Belgrade. Almost half of the calls were related to children up to six months of age and about breastfeeding, increased body temperature, and ARI. There is also a web site (www.halobeba.rs) for the HB program and more than 30,000 web site visits were made during 2008. Parents also have an opportunity to send questions by email. Halo Baby is a well recognized brand around the country (IPH Belgrade 2009). To date Halo Beba has been sustained through funding from the Belgrade IPH but despite its success the program is regularly at risk of having its funding cut.

Turkey

In order to address a fragmented organizational structure of PHC services, Turkey successfully introduced the Health Transformation Program (HTP) in 2003. "The HTP/UHI reforms represent a comprehensive blueprint to tackle the main weaknesses of the system. Based on these preliminary evaluations, it appears that the system has shifted utilization toward primary care and away from secondary care and increased patient satisfaction" (Akdag, 2008). The following year in December 2004, the law on Family Medicine was passed. All citizens were expected to have access to quality PHC based on two models of PHC by 2010. Family Health Centres conduct MCH home visiting along with other individually focused diagnostic and treatment services for local communities based on a registered patient roster. Community Health Centres provide population health and public health services such as education campaigns, monitoring and surveillance, and training for both providers and consumers. The eventual goal is for these two primary health care components to work collaboratively.

Maternal child health home visiting was universally provided to all families in Turkey prior to the HTP by both nurses and midwives (Kilic, 2009). The HTP has led to some disruption of the home visiting services as demand for clinic-based primary health care services and increased documentation and monitoring requirements have shifted the PCH focus, particularly the time of nurses', midwives' and health technicians', away from home visiting. MCH home visiting services and MCH and family planning centres were also weakened as demand for MCH services outstripped supply and there lacked sufficiently training PHC personnel (TUSIAD 2005; Akdag 2009). In addition, the public has not fully accepted the Family Health Centre model of PHC and the nurse's role in particular.

Delivery of home visiting services is currently under the supervision of primary care physicians working in Family Health Centres; although the Community Health Centres offer some MCH educational programs including pre- and post-natal group classes. The Family Health Centres use a dyad model of one family medicine physician to one nurse working as a team, each team with their own examination room. Family Health Centres model presents challenges for potential comprehensive approaches to maternal child health in that they are clinically focused on diagnosis and treatment of illness and have limited capacity for health promotion educational activities such as parent education groups and well baby clinics.

Home visiting is provided by both the physician (the initial visit and subsequent visits as needed), nurses, and midwives following protocols established by the Ministry of Health based on WHO guidelines. The nurse or midwife is responsible for reporting observations and assessments to the team physician. Follow-up and referral is planned jointly and often concrete supports are provided beyond the scope of practice by the nurses or midwives (e.g. food, clothing) as needed. Due to time constraints, nurses and midwives are not always able to provide the required number of home visits to families, especially well mothers and babies in accordance with the protocol. Data on standard MCH indicators is collected during home visits and is recorded in a standardized record kept by the physician. Protocols are monitored by the Ministry of Health and performance measures are used to

reinforce compliance with the protocols. Completing forms and entering data into the system for MCH home visiting has been identified as a challenge, particularly for nurses working in primary health care.

Little training has been done with physicians and nurses on collaborative team-based approaches to care which is needed for the successful implementation of the Family Medicine Centre model. There is recognition that the nurses' role needs to be redefined with clarified job descriptions, expanded responsibilities, and increased numbers enrolled and trained to work in the transformed PHC system. Based on assessment observations, the team-based approaches to PHC have been implemented more formally rather than substantively. For example, clinical nurses have been co-opted from secondary and tertiary settings to work in Family Practice Centres without having adequate knowledge or training. Moreover, Faculties of Nursing in Turkey seem not yet engaged in supporting the integration of nurses into PHC settings. In addition, there is an acute shortage of both physicians and nurses, with Turkey having the highest ratios of patients to providers in the WHO European region (ranked in 52nd place out of 53 countries). It is calculated that there is currently only one physician for 4000-5000 patients in primary healthcare facilities.

There are rural and remote regions in Turkey where access to health services is limited and this issue is being addressed by recently developed mobile primary health services, helicopter airlifts, and an incentive program for PHC providers choosing to work in these regions. Some MCH outreach or community-based programs have successfully addressed access to MCH services for rural and remote populations. An example of this is the Willows Project and is described in the following case study.

Turkey Case Study - The Willows Project: Community-Based Reproductive Rights and Health Information, Education, and Referral Services Project

The objective of the Community-Based Reproductive Rights and Health Information, Education, and Referral Services project is to educate those population groups who lack the ability to access health services and health promotion, to create awareness of reproductive health and patients rights, and encourage use of healthcare services. The goal of the project is to increase access to contraception; knowledge of family planning and emergency contraception; access to antenatal and child care; access to cancer screening; skills for breast self-exam; improve quality of reproductive health services; and, increase the use of reproductive health services.

The Willows Project is implemented by the Central Office in Istanbul and offices established in the provinces where the project is active. Women referred to as Field Volunteers perform the key task in the implementation of the Willows Foundation's community-based activities. Field Volunteers are women who reside in the project region and who have been specially trained to provide education and information to the local population of women and their husbands within the project's scope by going door-to-door.. Candidates for Field Volunteers are selected from women living in the project area who are willing to perform fieldwork and who are at least 18 years of age. Each Field Volunteer is assigned a region of responsibility throughout the activity, covering 1000 women on average. All women aged 15 to 49 in this region are visited multiple times and the number and frequency of the visits are

determined based on the women's needs. The primary purpose of the visits is to transfer needed information on reproductive rights and health to the woman and her husband. As a result of this interaction, women who want to receive reproductive-health-related services, or those who are recommended to obtain these services, are referred to a local healthcare site. The women, or their husbands, who have been referred to healthcare units are revisited after the referral, or according to the outcome of the referral.

A protocol was signed with the Ministry of Health to strengthen collaboration with the healthcare facilities involved in the project. According to this protocol, women reached through the project are referred to the existing public healthcare units in the area. In addition, as certain women prefer to obtain services from the private sector, close collaboration is established with the private healthcare providers in the region as well.

Health information is recorded electronically by the Field Volunteer. Data transferred to an electronic environment in the provinces are transmitted to the Central Office at 15-day intervals. The Central Office analyzes incoming data to monitor the performances of the Project Offices and Field Volunteers. The regular operation of this monitoring and evaluation system allows for the quick identification of needs, health planning, and timely provision of the necessary support. Classification according to contraceptive use forms an important part of the data collection as it enables tracking modern method users, traditional method users, and non-users under separate groups and sub-categories related to these groups, and ***helps determine the frequency of visits based on their different needs.***

Throughout the duration of the project services from 1999 to 2006, the proportion of women visiting a physician or hospital for a mammogram increased from 8 percent to 25 percent in more developed project areas and from 1.5 percent to 10-15 percent in less developed areas. The average number of antenatal visits to health services during pregnancy was six. The project trained 1,353 field educators, 89 supervisors, 56 program assistants, and 47 managers during the seven years of services covered by the evaluation. The Willows Project set up operations in 32 sites throughout Turkey where its field educators reached 920,000 women, visiting each four to five times on average. More than 320,000 women have been referred for clinical services. Through partnerships, training, and awards, the Willows Project improved reproductive health services at 376 health facilities where the women they reached would be served. Evaluations have shown that it has been a cost effective, community-based intervention.

3.2 Strengths and Weaknesses of CEE/CIS MCH Home Visiting and Outreach

A major issue continuing to affect all CEE/CIS health systems is the primary care transformation process and its impact, particularly on nursing and MCH home visiting and outreach services. In the context of health care reform, the countries of the CEE/CIS region have adopted various models of primary care delivery from family medicine to private provider, while some countries have for the most part maintained key structures of the Soviet system of primary care. Few countries of the region have fully realized authentic models of primary health care to address the social determinants

of health. This has hampered the revitalization of MCH home visiting services and limited their ability to provide appropriate public health services, including effective MCH programs. The Alma Ata Declaration from the International Conference on Primary Health Care (WHO, 1978) defines PHC as “essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally acceptable to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.” The World Health Report 2008 *Primary Care: Now More than Ever* (WHO, 2008) identifies four steps that are necessary to the PHC renewal process. These include providing universal access to primary care, reforming the way primary care services are organized and delivered, integrating primary care with public health and upstream approaches to dealing with health inequities, and strengthening leadership and oversight of health systems and services to be more responsive to population needs. The CEE/CIS region has an established tradition of MCH home visiting services. A significant strength of MCH home visiting in CEE/CIS is the continued existence of universal MCH home visiting services in many countries.

3.2.1 Equity and Access

In most cases, there is no evidence to suggest that PHC MCH home visiting services in the CEE/CIS countries successfully address issues of equity and access for vulnerable, marginalized, and most at-risk populations (e.g. ethnic or cultural minorities, developmentally challenged, poor and remote or rural). Particularly relating to ethnic and cultural minorities, in-country assessments of MCH home visiting services suggested that in most cases equity and access for vulnerable and marginalized populations was not well understood. In the countries assessed cultural and ethnic minorities populations would include minority ethnic groups in Kyrgyzstan, Kazakhstan, and Uzbekistan and in Moldova, Romania, and Serbia - the Roma. In the Central Asian countries it appears that few efforts have been made within the PHC MCH home visiting service to address the needs of cultural and ethnic minorities specifically the dearth of culturally appropriate materials. The most promising example of the PHC MCH home visiting services addressing issues of equity and access for cultural and ethnic minorities is in Romania and Serbia where Roma Health Mediators, which although not without their challenges, have made significant public health progress in the Roma communities and dramatically improved the equity focus of MCH services. MCH home visiting services in the assessed countries also do not adequately address issues of equity and access for other determinants of health such as poverty and disability. Many midwives and nurses who participated in the assessment intuitively understand the determinants of health and in some cases seem to support their clients' needs on an individual level with food or clothing. However, the MCH home visiting services provide few if any supports to address vulnerability related to poverty at a community or population level, through intersectoral cooperation and targeted services. Disability as previously discussed tends to be regarded more as a disease within the MCH home visiting services reinforcing practices of medicalization and institutionalization.

3.2.2 Quality

MCH home visiting services in CEE/CIS, as has been discussed, are characterized by a high quantity of low quality unstructured home visits. Moreover, primary care personnel in most countries are not only responsible for MCH home visiting and have generally very heavy workloads. Ability of primary health care professionals to deliver high quality MCH home visiting services is often limited by lack of time and heavy paperwork requirements. Based on feedback from nurses during focus groups conducted as part of this assessment protocols are largely outdated and onerous while quality and purposeful MCH home visits are not being conducted. In parts of the CEE/CIS region, MCH home visitors perform more of an administrative function, for example birth registration paperwork, rather than preventative or supportive functions. The education of nurses and midwives has not kept pace with current standards and best practices in MCH home visiting resulting in often outdated and inappropriate protocols, which are accompanied by negative incentives to deliver them. Quality improvement mechanisms, monitoring, and evaluation are all lacking or completely absent. In addition, the public has an established expectations related to MCH services particularly in relation to the number of visits expected by a patronage nurse following childbirth.

All CEE/CIS countries have an infrastructure of primary care facilities, but these too need to be enhanced to improve MCH outreach services. Policlinics and other primary health care institutions are the most prevalent setting for delivering most MCH home visiting services. There are many missed opportunities to enable mothers and parents to take more control over their health and that of their families through group education classes, drop-in support groups and well baby clinics. For instance, in rural areas of South Kazakhstan, Oblast mothers and infants can spend hours in the policlinic waiting for scheduled well baby check ups and it here that opportunities exist for group activities and peer-support through improved organization of services. MCH outreach services exist but are largely in isolation from the PHC system, such as the Fantastic CeCeFal Centre in Moldova. In order to sustain this essential partnership between primary health care, mothers, families, and community; successful model programs need to be better evaluated and promoted. These are low cost and effective ways to enable parents, create efficient systems, and improve coordination amongst the various sectors and systems that impact the well being of families.

3.2.3 Intersectoral Community Action and Social Participation

Intersectoral coordination, particularly between the health, education, and social sectors is one of other the main weaknesses of MCH home visiting and outreach services in the CEE/CIS region. In addition, there exists poor or no coordination between various levels of the health system, for example primary and secondary care; curative and public health, which leads to over-medicalization, excessive institutionalization, and expensive and unnecessary interventions. Importantly, qualified community health nurses play the central role in intersectoral coordination for effective MCH home visiting services. The emphasis in most CEE/CIS countries has been on recruiting and training physicians to specialize in family medicine and to assist them in adopting prevention and early intervention approaches. Very few efforts have been made to provide similar training opportunities

for nurses, who are the backbone of most MCH home visiting systems around the world. To further exacerbate the issue, nurses are leaving the profession for better jobs or leaving the country for other economic reasons. Nurses are undervalued, underpaid, and under trained which is the underlying issue regarding enhancing performance around intersectoral coordination of MCH home visiting and outreach services in all the CEE/CIS countries reviewed.

One of the challenges in strengthening MCH home visiting services to improve maternal and child health and well-being is a prevailing attitude that the state is responsible for individual health. Monitoring and control over the content and implementation of primary care MCH home visiting services, both at the individual and community levels, is quite limited in the CEE/CIS region. This is true not only for MCH home visiting services but many of the donor led projects and programs that have been delivered to enhance maternal and child health and well-being, such as the Care for Development programs. Kyrgyzstan is an example of a country in the region that has substantially reorganized the way primary health care is organized and delivered. The Village Health Committee is one example where patients are seen as more than just the recipients of basic services and are given life skills supports in the form of self help, empowerment, and community development. This enhanced primary care model provides opportunities and enables citizens to participate in decisions impacting their health including environmental, educational, and economical issues. In most MCH home visiting models in the CEE/CIS region, little concerted effort has been made to encourage the population to take responsibility for their own health. Social media campaigns and enabling strategies to support families and communities are not part of the current health system and are conducted generally on an ad hoc or project basis. A broader understanding of what makes individuals, families, and communities healthy needs to be promoted with less emphasis on medical solutions.

3.2.4 Scaling Up MCH Home Visiting and Other Outreach

Scaling up in Global Health, including much of the UNICEF discourse, has been largely defined as greater coverage, which in turn refers to improving reach and is measured by an increase in the number of people accessing services at the population level (Mangham et al 2010). A functional definition of scaling up that examines quality, measurability, equity, and scope of services and programs is more reflective of the need to improve quality rather than coverage. This definition is particularly applicable as it corresponds to the challenge in shifting from **quantity** (reach) of primary health care services to **quality**, measurability, and scope; a reorientation the CEE/CIS countries will need to realize for continued improvements in maternal and child health outcomes.

Increasing coverage of untargeted population-based health services has the potential to decrease overall morbidity and mortality and its inclusive reach can be viewed as a strength. However, untargeted programs also have the well-known potential to exacerbate health inequities as they often do not reach the most vulnerable or marginalized populations. In this respect, one of the main challenges for MCH home visiting and outreach services in CEE/CIS are the limited mechanisms and capacity within the National, Oblast or Regional, and Rayon or Municipal Departments of Health to

identify and address health equity and respond with appropriate programs and services (targeted services) at the community level.

Boyce et al (1997) provide a useful framework for scaling up that can be applied to MCH home visiting systems in the CEE/CIS region. This framework for scaling up of interventions includes three contextual considerations: the pre-conditions for growth, the strategic dilemma, and the response mechanism. The framework identifies four pathways for scaling up as shown in **Error! Reference source not found.**. The first pathway is project replication which is characterised by the desire to expand the delivery of a given service or program. The second pathway is community mobilization which ensures community participation and local support. The third pathway refers to changing the environment to be more favourable to equity and community action through policy reform at the local, regional, or national levels. The fourth pathway is international lobbying through institutions such as the World Bank to reorient grants and loans to support social change.

Pre-Condition for Growth	Strategic Dilemma	Response Mechanisms	Scaling up Pathways
Organizational Capacity Program Effectiveness	Opportunities and risks of growth	Collaboration Resource Mobilization	Project Replication Community Mobilization Influencing Policy Reform International Lobbying

Adapted from Boyce et. al. 1997

Change takes time and approaching scaling up from a developmental perspective is necessary if long-term quality improvements are to be achieved. Successful initiatives with demonstrated positive outcomes lead to replication. Scaling up of MCH natal home visiting services in CEE/CIS can also be informed by some of the following findings from sustainability and scaling up of IMCI interventions relating to sustainability and scale up (Bryce 2005).

- The three-to-five-year timeframe to achieve national coverage for IMCI was unrealistic. This led to shortcuts resulting in reducing the quality of the intervention.
- Operational plans and tools to translate policies into action were generally not present in IMCI programs.
- Lack of prioritization of high impact interventions addressing major causes of mortality and morbidity.
- Implementation and quality monitoring plans were generally not addressed in IMCI.

The lessons learned in the Bryce et al (2005) analysis speak to the connection between sustainability, scale, and health system strengthening, particularly as scale up is discussed in terms of quality rather than reach. Scale up is predicated on the success and sustainability of any program or intervention. MCH initiatives in CEE/CIS that have been sustainable have tended to be community-based or integrated into the primary health system. The Village Health Committees in Kyrgyzstan strengthen the MCH services within the PHC system particularly around issues of access, acceptability, and community health planning. The Willows Project had a strong focus on addressing issues of access to reproductive health and family planning services in PHC settings along with enhancing the continuity

of care from community to the health care system. Financially these projects remain donor dependent but with broad local partner and stakeholder engagement and infrastructures integrated into the PHC services, these projects have had a transformative effect on the PHC system.

3.2.5 Financing and Costing Options for PHC MCH Home Visiting Services

Quality improvement will not be possible without adequate financial resources. Financing for MCH home visiting can come from social health insurance schemes, health care budgets, general tax revenue, or dedicated taxes (such as a tobacco tax). In Western Europe, North America, Cuba, and many other countries, separate funding envelopes for MCH home visiting programs are the norm and fall into three broad categories: 1) part of a larger funding envelop (such as an early childhood development program); 2) as part of a joint funding envelop (funding from two or more programs, departments, or Ministries); or 3) as part of a separate funding envelop (specific funding for an MCH home visiting program). Specific funding envelopes for MCH home visiting services are more accountable than the line-item budgeting used in CEE/CIS as the sources of funding are actual expenditures that can be more readily tracked. There are no separate national funding envelopes for MCH programs in the CEE/CIS countries included in this assessment.

An example of a separate funding envelop for MCH home visiting is the 1.8 Billion Affordable Care Act Maternal, Infant and Early Childhood Home Visiting Program in the United States, available to all states for their MCH home visiting programs. A funding base of \$500,000 USD goes to each state, plus an amount equal to the funds currently provided by the Evidence Based Home Visiting Program, plus an amount based on the number of children in families at or below 100% of the federal poverty level in the state as compared to the number of children nationally. To ensure that the Federal block grants do not replace existing funding there is a Maintenance of Effort requirement that grants supplement and not supplant funds from other sources.

There is a need to address health inequity and target services to at risk and vulnerable populations in most countries of the CEE/CIS region. Funding formulas are a tool that can increase equity in the provision of MCH home visiting services in the region. Weighted capitation formulas using risk and need adjusters such as those used in the United States, UK, and Canada promote health equity and help in providing appropriate services to at risk and vulnerable populations. They also provide measures for the equitable distribution of funds geographically. In using weighted capitation formulas there should be sound rationale that promotes a needs-based approach to funding focusing on improving health equity, thereby, providing for appropriately-enhanced services for those most in need. A degree of caution is needed when identifying adjusters in order to avert perverse incentives. For instance, if an MCH home visiting program's funding formula includes an adjuster for the number of children who are Vitamin A deficient, there may be a disincentive to address Vitamin A deficiency in order to maintain higher funding levels.

Funding formulas for MCH home visiting in CEE/CIS using models such as capitation would likely increase the health system capacity to address health inequities and disparities. Existing CEE/CIS

funding models for MCH home visiting drawn from broader health care system funding or using historic funding models and budget line items, generally have limited capacity to orient resources to those most in need and are often contributors to health inequity particularly in terms of access and quality of care (Diderichsen, 2004). One of the main challenges for many of the CEE/CIS countries in using models like weighted capitation with risk and need adjusters would be obtaining reliable and consistent socio-demographic and health data needed to calculate the formulas. Also, any funding formula should be subject to regular review including input from program partners and stakeholders at all levels.

Sample budget of recurrent staffing costs from HBHC program

Staffing

- 1 FTE Nurse Coordinator / Program (Planning, monitoring and evaluation)
- 1 FTE Nurse Advisor / 100 cases
- 1 Paraprofessional / 25 cases
- 1 Social Worker / 100 cases (education, housing, finance, child protection)
- Administrative staff

Staff Training

- 1-2 week orientation (new staff)
- 2 weeks – job shadowing (new staff)
- Continuing education every 6 months (breastfeeding, child protection, home visiting safety, family violence, post partum support)

Funding for MCH home visiting services should also be tied to service standards and benchmarks, which can be used to improve quality of MCH home visiting services for two main reasons. The first reason is to create incentives to orient services for improving health equity and the provision of appropriate services to at risk and vulnerable populations. The second reason is to provide mechanisms for quality improvements. Consideration can be given to financial incentives for jurisdictions which meet MCH home visiting program objectives, but incentive structures should be considered carefully and allow for adjustments over time to ensure they are achieving their aims. In most CEE/CIS countries there are services standards in the form of outdated protocols that define the number of visits required and type of service, which have not resulted in quality improvements. Benchmarks related to health and well-being outcomes are an option to provide primary health care institutions incentives for quality improvement.

MCH home visiting program costs are dependent on many different variables, which include ensuring they are delivered “at a cost the community and country can afford” (WHO, 1978). In determining the mix of resources needed for a MCH home visiting program in CEE/CIS countries, the following areas should be considered:

Goal: What is the program trying to achieve?

Target populations and beneficiaries: What types of mothers, infants, children, and families are being served by the program (e.g., targeted, universal, or blended programs)?

Setting/context: Is it an urban, rural, or remote setting? Is it being delivered by a polyclinic, a community centre, or a non-governmental organization?

Program scope: What types of activities is the program undertaking?

Human resources: Does the program use volunteers, paraprofessionals, or professional health care workers?

Duration: How long do individuals and families participate in the program?

Monitoring and Evaluation: What indicators will be used, who will collect and analyze the information, and how will the information be used?

Once the program has been designed there are non-recurrent costs associated with project start up and recurrent costs associated with program implementation. Non-recurrent start up costs can include project development, facility construction or upgrades, equipment, materials (reusable books, guides and toys), training at all levels, and technical experts. Recurrent costs can include salaries, administration, training, telecommunications, supplies, transportation, and IEC materials.

4 Strengthening MCH Home Visiting Services in CEE/CIS

This section describes options for improving maternal and child health through strengthened home visiting services based on the best available evidence and the assessments of MCH home visiting services in the CEE/CIS region. Service delivery in terms of timing and content of intervention packages for the number of universal MCH home visits consider the best available evidence and current practice from high income countries, the WHO/UNICEF countdown indicators, and the *WHO/UNICEF Joint Statement Home visits for the newborn child: A strategy to improve child survival* (WHO/UNICEF 2009). Continuity of care was considered from the two perspectives presented in the UNICEF/WHO Joint Statement. This Statement defined the continuum of care as “a continuum in the lifecycle from adolescence and before pregnancy, pregnancy, birth and during the newborn period and a continuum of care from the home and community, to the health centre and hospital and back again” (UNICEF/WHO, 2009). Approaches and strategies offered in this section are by no means prescriptive and should be translated and adapted to meet the needs of specific CEE/CIS jurisdictions and populations being supported by MCH home visiting services.

4.1 Public Health Approaches to MCH Home Visiting Planning and Implementation

Effective MCH home visiting programs are based on public health approaches and have strong management frameworks based on planning-implementation-evaluation cycles. In order to better define what is meant by the public health system, in 1999 the Pan-American Health Organization/World Health Organization decided on 11 essential public health functions as listed as follows.²

Essential Public Health Functions

1. Monitoring, evaluation, and analysis of health status
2. Surveillance, research, and control of the risks and threats to public health
3. Health promotion
4. Social participation in health
5. Development of policies and institutional capacity for public health planning and management
6. Strengthening of public health regulation and enforcement capacity
7. Evaluation and promotion of equitable access to necessary health services
8. Human resources development and training in public health
9. Quality assurance in personal and population-based health services
10. Research in public health
11. Reduction of the impact of emergencies and disasters on health

MCH home visiting based on public health models will build on all of these Essential Public Health Functions. At the practitioner level home visiting nurses and midwives will promote health and social participation. At a service delivery level there should be evaluation and promotion of equitable access to necessary health services. To support quality improvements in MCH home visiting services it is necessary to develop human resources and ensure quality in personal and population-based health services. Research and evidence-based decision making is also critical to ensure that there is supportive policies

²<http://www.paho.org/english/dpm/shd/hp/EPHF.htm>.

and institutional capacity for MCH home visiting planning and management. Public health and PHC structures also need to monitor, evaluate, and analyze the health status of the population for program planning. As one of the five action areas of the Ottawa Charter for Health Promotion (WHO 1986), strengthened community action is also important for improving health and well-being.

4.1.1 Community Health Planning, Monitoring, and Evaluation

Public health MCH home visiting programs and early interventions are also designed and implemented using some type of community-based planning-implementation-evaluation cycles. **Error! Reference source not found.** represents a common planning-implementation-evaluation cycle (Edwards, Etowa and Kennedy, 2007). Based on this cycle the following steps are included in a planning-implementation-evaluation cycle:

- Conduct a situation analysis or community assessment;
- Identify the problems or issues of concern;
- Select the best evidence-based alternative(s);
- Design and implement the program;
- Conduct ongoing monitoring and program evaluation;
- Analyze and interpret the results of the monitoring and evaluation process; and,
- Use results to modify the program to inform decisions.

The situation analysis or community assessment can include a variety of methods including a strengths, weaknesses, opportunities, and threats (SWOT) analysis; qualitative interviews and focus groups. Program design should involve a two-stage logic model development process. Components, activities, and target groups need to be identified and short-term and long-term outcomes should be determined (Edwards, Etowa and Kennedy, 2007). Examples of community health assessment tools include the WHO's Rapid Assessment and Response methodology³ and the WHO's *Community Health Needs Assessment: An introductory guide for the family health nurse in Europe* (2001).

Evaluation is also an integral component of program design. The Public Health Agency of Canada provides an effective model for program monitoring and evaluation that involves the following five steps:

1. Determine the focus or reason for the evaluation.
2. Select the methods for the evaluation.
3. Develop the evaluation tools.
4. Conduct the evaluation by gathering and analyzing data.
5. Act on findings by making decisions.⁴

Operational research conducted as part of MCH home visiting program implementation to measure health and social impacts similar to what is currently being done in Cuba could be considered to address some of the research gaps in MCH home visiting for LMICs.

³ <http://www.who.int/docstore/hiv/Core/Index.html>

⁴ <http://www.phac-aspc.gc.ca/php-ppsp/toolkit-eng.php>

4.1.2 Values and Principles

Framing MCH home visiting services within the context of specific values and principles have a demonstrated evidence-based impact in promoting equity, quality of services, and enhancing health and well-being outcomes for mothers and children in the following key areas.

Women's and Children's Rights: The aim of all UNICEF-supported activities is the recognition of the rights of women and children, as articulated in the Convention on the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination against Women. Governments who are signatories to these conventions also have an equal responsibility to protect and promote women's and children's rights. Moreover, current UNICEF policy stipulates improved articulation of human rights for improving MCH outcomes. Human rights and child rights principles should work in all sectors, and at each stage of the process. These principles include: universality, non-discrimination, the best interests of the child, the right to survival and development, the indivisibility and interdependence of human rights, accountability, and respect for the voice of the child. Programmes for MCH should support those who have obligations to respect, protect and fulfill rights, by developing capacities to do so. Programs should also assist those with rights to develop their capacity to claim their rights. Human rights-based approaches have been demonstrated to improve the quality of services and strengthen health systems.⁵

"There are many tools available to assist...in program planning, but their utility will be diminished if underlying determinants of health are ignored and programs are not developed without consideration of social justice issues" (Edwards, Etowa and Kennedy, 2007).

Empowerment: Empowerment is an active, involved process where people, groups and communities move toward increased individual and community control, political efficacy, improved quality of community life, and social justice. Empowerment is a community concept because individual empowerment builds from working with others to produce change and wanting increased freedom of choice for others and society. Empowerment is not something that can be done to or for people, rather, it involves people discovering and using their own strengths. Empowering strategies or environments (e.g., healthy workplaces that support flex time or exercise) build capacity by helping individuals, groups, and communities discover their strengths and ability to take action to improve their quality of life (CCHN, 2008). Houston and Cowley (2002) propose the following features of empowerment for home visiting:

- Exploring how clients can harness their own health creating potential and capacity, which involves giving control of the interaction to the client.
- Exploring health in a participatory way that allows judgements to be made, but not in isolation of the client.
- Extending approaches to enhancing health beyond the particular individual or family, to encompass the situation in which the family lives.

⁵ <http://www.unicef.org/rightsresults/> (June 5, 2010)

Equity: Equity means fairness. Equity in health means that people's needs guide the way opportunities for well-being are distributed (PHAC, 2007). Health equity is the absence of systematic differences in health, both between and within countries that are judged to be avoidable by reasonable action. The Commission on the Social Determinants of Health concluded that "social injustice is killing people on a grand scale" and made three overarching recommendations: improve people's daily living conditions; tackle the inequitable distribution of power, money, and resources; and measure and understand the problem and assess the impact of action (WHO, 2008).

Transparency: The public needs to be informed about their rights, entitlements, and responsibilities in relation to individual and population health. Health care workers participate in the management and delivery of health services. Policy makers develop policies through open and participatory processes. Data related to system performance is regularly made public.

Culture: Programs need to take issues of cultural diversity into account and include a philosophy of cultural appropriateness and cultural sensitivity (NCCDH, 2008).

Individual responsibility for health: While there are many socio-environmental factors that determine health; individual knowledge, behaviour, and attitudes play an important role in determining health outcomes. Parents have an important role to play in their own health and the health of their children.

4.2 Delivery of MCH Home Visiting Services

Based on the literature, current policy trends in high income countries and MCH home visiting service delivery models being implemented in CEE/CIS, it is suggested that a blend of universal services and targeted programs would be the most appropriate evidenced-based and cost-efficient option for supporting positive child and maternal health outcomes and well-being in the region. In terms of content of home visits, research indicates that the characteristics of effective programs include: an intervention designed appropriately to fit family needs, home visitor qualifications to fit program design, ongoing staff training and supervision, cultural competency, and family-centered approaches (Weiss, 2006). Whether universal or targeted, MCH home visiting interventions in CEE/CIS will need to be supported by appropriate material resources, professional competencies, and approaches.

4.2.1 Universal Home Visiting Services

There is insufficient evidence to suggest that the quantity of universal well mother and well baby visits has significant positive health or social impacts. WHO/UNICEF recommendations for pre-natal visits from the countdown indicator used for Millennium Development Goals 4 and 5 is four or more antenatal care visits by a provider (skilled or unskilled) for reasons related to pregnancy in a clinic or home setting (UNICEF, 2008). For babies born in a health care facility, the WHO/UNICEF Joint Statement *Home visits for the newborn child: A strategy to improve survival* (WHO/UNICEF 2009) recommends the "first home visit should be made as soon as possible after the mother and baby come home. The remaining visits should follow the same schedule as for home births" (UNICEF/WHO, 2009). For home births a home visit

should be made within 24 hours, a second home visit within 72 hours, and a third, if possible, within 7 days after birth according to the UNICEF/WHO Joint Statement. Though countdown indicators and the WHO/UNICEF Joint Statement (WHO/UNICEF 2009) focus on maternal and child survival there is insufficient evidence to demonstrate the need for additional visits for well mothers and babies to improve health and well-being. In the Healthy Babies Healthy Children program in Ontario, Canada policy makers have limited the number of universal home visits to only one post-natal home visit scheduled within 48 hours of discharge from the hospital for those families that consent to a home visit. For universal MCH home visiting in CEE/CIS, one antenatal and three post natal home visits is suggested with the timing of post natal visits conducted according to the UNICEF/WHO Joint Statement recommendation.

Consideration can be given to additional universal MCH home visits if there is a specific need such as availability and access to other health and social service services that provide support for maternal and child health and well-being (e.g., pre and post natal classes, primary health care services). An increased number of universal MCH home visiting services might be appropriate for rural or remote populations which have limited access to primary health care services and family-centred programs. In these cases MCH home visiting may be the most appropriate including available services delivery models for promoting maternal and child health and well being. In addressing specific needs through universal MCH home visiting services, the number of visits can vary depending on the needs of the population and the capacity of the MCH home visiting service providers. For instance, visits during pregnancy could occur once per month as in the case of a nurse-family partnership program (Kitzman, 2000) or conducted once per trimester as offered by the Healthy Baby Healthy Child programs in Ontario, Canada. In the post-natal period additional home visits could be scheduled when children reach key developmental milestones (e.g., 6 months, 12 months, and 18 months); based on immunization schedules or to meet other identified health and social needs for mothers, children, and families.

4.2.2 Enhanced MCH Home Visiting Programs

As previously described in the nurse-family partnership program, enhanced services can be targeted to achieving various health and well-being outcomes for mothers, children, and their families. The type of enhanced home visiting program will vary depending on the health and well-being objectives of the MCH home visiting program. In each of the best practice models, the MCH home visiting services are programs that are community-based and individually tailored to meet the needs of mothers, children, and their families. Frequency and timing of MCH home visiting will vary depending on the type of program, target population, and health and psycho-social issues to be addressed. Regular program monitoring and evaluation is important to ensure that clients are provided with the most appropriate and timely services. In the Healthy Babies Healthy Children program the timing and frequency of pre and post natal home visiting is established collaboratively between the home visiting nurse and the family and can vary significantly for each family. In the case of the nurse-family partnership, the home visiting schedule is more prescribed. During pregnancy visits take place once a week for the duration of the pregnancy. Visits take place once a week for the first six weeks postpartum. For infants up to 21 months old, visits occur every other week and up to 24-months visits take place one per month. The percentage of total

women who are pregnant, mothers and newborns enrolled in an enhanced home visiting program will also vary depending on the program objectives and target population.

4.2.3 MCH Home Visiting Framework

PHC Pre and Post Natal Home Visiting and MCH Outreach Services < 12 weeks to 3+ years

MCH		Health Workforce	Capacity Development	MCH and Well Baby Programs
PHC Home Visit Schedule				
Prenatal	Visit 1 Clinic < 12 weeks	Risk Assessment Orientation to MCH Record	Multidisciplinary Care Team	Family-Centred Prenatal Programs Family-centred approach Peer-led group support 1 ^o Nurse/midwife led group/individual counselling drop ins IEC Materials
	Visit 2 & 3 Clinic		Multidisciplinary Care Team	
	Visit 4 Home Visit	Assess and Support Moms and Families Baby Readiness Prenatal Depression Addictions (Illicit Drug Use, Smoking, Alcohol) Family Violence Nutritional Status Parental Stress Home Environment (physical, socio-emotional, household food availability/security, ETS) Family life/culture Reproductive Health Child Abuse/Neglect Prevention Enhanced Support for At Risk Moms and Families	1 ^o Nurse or midwife	
	Visit 5 Clinic		Multidisciplinary Care Team	
	Visit 6 Clinic		Multidisciplinary Care Team	
Delivery	24 -48 hours hospital stay for healthy mother/healthy term baby	Care Path High Risk Screening (e.g, Parkyn Tool) Integrated Care Pathway Counsel and Support Orientation of MCH Record Exclusive Breastfeeding (within 1 hr after birth) Early identification of danger signs and care seeking Promote Skin to Skin Care	MCH Care Team Physician, MH 1 ^o Nurse, 1 ^o Midwife, CH 1 ^o Nurse, Paediatrician, Feldscher, 3 ^o Nurse, 3 ^o Physician, Social Worker	Capacity building Development of care pathways Team-based approach to MCH care and support Case management Knowledge Development: People-centred approach
Post natal	Home Visit 1 < 24 hours after discharge	Care Path Assessment of High Risk Families Assess and Support Exclusive Breastfeeding Maternal and Infant Nutrition Promote Skin to Skin Care Early identification of danger signs and care seeking Post Partum Depression/Maternal Well Being Maternal, newborn and child health Sexual and Reproductive Health Child Protection Family Violence Addictions (Illicit Drug Use, Alcohol, Smoking)	1 ^o Nurse	Family-Centred Well Baby and Parenting Programs Family-centred approach Peer-led group support 1 ^o Nurse/midwife led group/individual counselling drop ins IEC Materials
	Home Visit	Trauma and Accident Prevention Parenting education Home Environment (physical, socio-emotional, household food availability/security, ETS)		
	Visit 2 < 48 hours after discharge Home Visit			
	Visit 3 7 - 14 days after discharge Home Visit			
Enhanced Home Visiting Programs (0 - 5 years): Intervention for High Risk Families				
Enhanced Home Visiting Schedule	Integrated Care Pathway Tailored intervention	Mothers, Families, Paediatricians, 1 ^o Nurse, Lay Visitors, Social Workers	Capacity building Care pathways Skills Building: Communication Individual Counselling Empowerment Knowledge Development: ECD Assessment Parenting Education Child-to Child Approaches Community-development People-centred	

MCH Health Record
 Prenatal (< 12 weeks) – 5 years
 To be presented by parent(s) and/or primary caregiver and updated with each visit (home or clinic)

4.2.4 Maternal-Child Health Record

A Maternal-Child Health Record is a paper record of a child's growth, development, and use of health services that parents maintain and is required for all contact with the health care system, including home visitation. The use of a child health record promotes continuity of care from prenatal clinic visits through delivery and into the post natal period until a child reaches school-age or older. It is a tool for empowering primary care givers to increase parenting knowledge and to take increased responsibility for their child's health. It facilitates more meaningful interactions with the health care system by providing shared information between the health care professional and parents. Examples of child health records include the Red Book used by the National Health Service in the United Kingdom⁶ and the Blue Book used in New South Wales, Australia.⁷ An example from Moldova of a Maternal-Child Health record is the *Carnet Medical Perinatal*, which is a record for newborns to children 3 years of age with informational materials on growth and development for parents.

4.2.5 Assessment Tools

Assessment tools can identify risk and be used to design tailored home visiting interventions. However, Houston and Cowley (2002) caution that relying on family needs assessment checklists, especially those that focus on deficiencies, can be disempowering and stigmatize already vulnerable families. Screening tools such as those used for monitoring early childhood development and early identification of developmental delays are important tools but need to be used in conjunction with appropriate support and referral services. Adequate training of health professionals to administer the assessment tools is also critical.

4.2.6 Integrated Care Pathways

Tools help professionals create appropriate care pathways and reduce or eliminate subjective decisions about interventions. For example, an Integrated Care Pathway (ICPs) is one tool that can be used to plan tailored care and create support programs for families. "A clinical pathway is a multidisciplinary practice guideline that recommends appropriate use of key resources to achieve quality outcomes within targeted time frames and phases of care" (Hedges, 2005). ICPs are a tool for promoting continuity of care for mothers and babies by guiding pregnant women from prenatal care and support through delivery and into post natal care and support. Emphasis is placed on the provision of appropriate care and support that is suitable for each individual patient in relation to the clinical evidence base and consensus on best practice. In practical terms, the ICP can act as the single record of care, with each member of a multi-disciplinary team required to record his or her input on the ICP document. The use of both process-based (i.e., the tasks to be performed) and outcome-based documentation (i.e., the results to be achieved) acts as a guide to decision making and provides each professional with valuable information about the patient's condition while also monitoring his or her progress. The result is that ICPs facilitate outcome measurement in antepartum and postpartum home visitation. Following the development of an ICP for

⁶ <http://www.healthforallchildren.com/documents/59865%20Scottish%20PCHR-dwSf9e48FtSU3RSL-1264421983.pdf>

⁷ http://www.cyh.com/library/child_health_record_section1.pdf

children and families, home visiting nurses or lay workers provide support to address the identified needs and health and well being outcomes outlined in the ICP.

4.2.7 Human Resources and Nursing Competencies

Recent studies have found that some programs are more effective when delivered by nurses (Doherty, 2007; Fergusson, Grant, Horwood, & Ridder, 2005; Olds, 2004; Olds et al., 2002). There is also evidence indicating that a team consisting of a nurse and a paraprofessional can be effective (Norr et al., 2003) if there is sufficient training and good interaction between the paraprofessional and nurse. Woodgate and Brown concluded that the success of the Winnipeg program, in addition to being strength-based, was due also in part to the careful selection process of staff, staff training, and strong staff supervision.

Developing a cadre of professional community health nurses with expertise in coordinating programs is critical to the delivery of effective MCH home visiting services. There are five standards for community health nursing developed by Community Health Nurses Canada (CHNC, 2008). These standards are: promoting health, building individual and community capacity, building relationships, facilitating access and equity, and demonstrating professional responsibility, and accountability. Within these standards of practice, community health home visiting nurses also have the following competencies related to activities, functions, goals, and outcomes that are central to home health nursing practice (CHNC, 2010):

- Assessment, monitoring, and clinical decision making
- Care planning and care coordination
- Health maintenance and restoration
- Teaching and education
- Communication
- Building relationships
- Promoting access and equity
- Building capacity
- Health promotion
- Illness prevention and health protection

Good communication and counselling skills are particularly important evidence-based core competencies for health care workers providing support to children and their families. In this context, a strength-based interaction has been shown to be an effective strategy for communicating with and counselling families. In their discussion paper, O'Brien and Bacca (1997) concluded that client-centered home visits with nurses were more beneficial when a strength-based approach was used in place of problem focused interactions. In a study of an early home visiting intervention in Winnipeg Canada, Heaman et al (2006) found that program success was due in part to the inclusion of a strength-based philosophy.

5 MCH Home Visiting Health System Strengthening in CEE/CIS

As a determinant of health, the health system has, up until recently, been relatively neglected in the context of Global Health programming. Major funders such as Global Fund and UN Agencies such as UNICEF are increasingly recognizing certain limitations of vertical health programming and disease specific responses and developing a greater understanding of the importance of health system strengthening in achieving sustainable results and better health outcomes. One of the main constraints of donor and international agency led initiatives designed to improve MCH and well-being in the region has been time limitations (for children aged three to five years), a dependency on donor, and most importantly a focus on short-term outcomes combined with a lack of focus on medium and longer term MCH and well-being outcomes. Moreover, few initiatives aimed at improving maternal and child health and well-being had articulated health system strengthening and community development objectives. As a result, sustainability of initiatives to improve maternal and child health and well-being have been limited and constrained from scale up. As previously discussed, there is a well-established MCH home visiting infrastructure in the CEE/CIS region. This home visiting service delivery model has regularly been appropriated to deliver project activities with little attention paid to enhancing the overall quality of the MCH home visiting service. To address the issues of **quality, sustainability, and scale up of MCH home visiting services**, the UNICEF RO has adopted a health system strengthening and equity-based approach to improving MCH and well-being in the CEE/CIS region. The following is a set of recommendations that can be taken to improve the quality and equity-focus of MCH home visiting services in the CEE/CIS region based on a health system strengthening framework.

5.1 Leadership and Governance

Findings

- Most countries have prioritized MCH, particularly in relation to achieving Millennium Development Goal targets 4 and 5.
- MCH home visiting services in most CEE/CIS countries are guaranteed as part of the basic package of universal primary care services.
- Ministry of Health guidance of MCH home visiting services is mostly focused on ensuring adherence to protocols.
- Few of the PHC MCH home visiting services incorporate an equity-based approach to the delivery of the services, leading to increased disparities in maternal and child health and well-being determined by income, geographic distribution, ethnicity, culture, remote/rural/urban populations, gender or ability of mothers, children and families.
- Intersectoral cooperation between health, education, and social services is weak or non-existent in MCH home visiting policies and programs.

Proposed Actions

- Improve Ministry of Health protocols for MCH home visiting to incorporate quality improvement and indicators to measure the appropriate level of service based on income, geographic distribution, culture, religion, remote/rural/urban populations, gender or ability of mothers, children, and families.
- Enhance mechanisms for intersectoral cooperation between the health, education, and social services sectors in policy development and service delivery of MCH home visiting services particularly in the areas of child protection, reproductive health, family planning, early childhood development, and health and social equity.

5.2 Health Services

Findings

- MCH home visiting is often delivered according to outdated and impractical protocols.
- Some jurisdictions (urban centres with high birth rates, remote areas, PHC institutions with health workforce shortages) struggle to complete the required number of visits due to competing priorities and either do not conduct the visit, conduct short and ineffective visits, or make contact by telephone.
- Medical screening and assessments are used to reinforce a culture of over-diagnosis and medicalization.
- There is limited evidence in the region to demonstrate the effectiveness of universal PHC MCH home visiting services.
- There is limited capacity of MCH home visiting services to provide appropriate services to vulnerable or marginalized populations.

Proposed Actions

- Regularly review and revise existing protocols based on current scientific evidence on MCH home visiting.
- Use appropriate assessment tools to determine and provide enhanced MCH home visiting to mothers, children, and families at risk.
- Provide skills training for counselling and support based on people-centred and strength-based approaches.
- Enhance existing universal MCH home visiting services in the CEE/CIS region by integrating programs targeted at early childhood development, child protection and reproductive health, and family planning.
- Increase MCH home visiting services to vulnerable or marginalized populations.

5.3 Health Information Systems

Findings

- Patronage nurses are required to fill out many forms and collect a lot of information creating a heavy workload due to the amount of paperwork they are required to complete.

- The indicators that the patronage nurses are required to report on are often outdated and do not provide useful information (e.g., the indicators rarely identify causes) and do not lead to quality improvement of MCH services.
- The information flow is horizontal and information feedback loops are missing.
- Information on MCH home visiting, particularly the number of visits conducted in accordance with the protocol (which is often excessive), is used as a job performance measure through a system of negative incentives.

Proposed Actions

- Review MCH home visiting data collection requirements to reduce the amount of paperwork patronage nurses are required to complete.
- Review and revise MCH home visiting indicators so that they contribute to quality improvements in the delivery of MCH home visiting services.
- Develop and use indicators that support equity in the delivery of MCH home visiting services for local planning.
- Create more positive job performance measures for patronage nurses based on evidence-based protocols and positive performance.

5.4 Health Human Resources

Findings

- A renewal and revitalization of patronage nursing is needed to strengthen any MCH home visiting services in the regions.
- One of the opportunities that exist in most CEE/CIS countries is Nurses Associations that have the potential to play a leadership role in a renewed and revitalized MCH patronage nursing service.
- In the CEE/CIS countries the patronage nurses have limited to no training and continuing medical education opportunities.
- The distribution of nurses is an issue between rural and urban; migration from low income countries to middle income countries (for instance, from Kyrgyzstan to Kazakhstan and Russia); and the low ratio of MCH home visiting nurses to population of reproductive age served.
- Patronage nurses currently have a narrow scope of practice and little autonomy to make decisions.
- Nurses are working without standards or job descriptions and in many cases are tasked with chores such as cleaning.

Proposed Actions

- Enhance the leadership role of Nurses Associations in supporting patronage nurses through the development of supportive policies, guidelines, and training opportunities.
- Develop core competencies for community home visiting nurses and standards of practice through collaborative processes.

- Conduct regular training on MCH home visiting and provide continuing medical education in the areas of community nursing and MCH home visiting.
- Renew and revitalize the role of patronage nurses as part of the “health care team”.
- Provide incentives to attract and retain nurses as a profession.

5.5 Health Financing

Findings

- There is inadequate funding for MCH home visiting services and outreach programs in the CEE/CIS region.
- Downloading financing of MCH home visiting services and outreach programs to the municipal level can put programs at risk.
- Resources for MCH home visiting are often not prioritized over other competing health services within PHC.

Proposed Actions

- Investigate models to enhance the financing of MCH including creating a separate funding envelope for MCH home visiting services in addition to the basic package of services.
- Consider risk adjusters to address equity issues such as income, geographic distribution of health resources, culture/religion, remote/rural/urban populations, gender or ability of mothers, children and families.
- Adequately fund MCH home visiting services in remote and rural areas with low population densities and prioritize investments to vulnerable and marginalized populations.

5.6 Essential Medical Products and Technologies

Findings

- In almost all countries assessed both parents and health care professionals request additional educational materials and resources.
- Culturally appropriate IEC and training materials are scarce in most settings.
- Materials have been developed but are in insufficient supply to meet the distribution needs of patronage nurses.
- Age-appropriate, early childhood development materials such as toys and books are often lacking.

Proposed Actions

- Provide every pregnant woman with a MCH health record.
- Increase the availability of MCH materials of all kinds for patronage nurses delivering MCH services.
- Adequately equip MCH home visitors and community centres with age-appropriate toys, information, and educational materials.

4 Conclusion

MCH home visiting and outreach services are an efficient and effective service delivery model to improve maternal and child health and well-being. While “optimal” timing and content of MCH home visits is not known, there is a body of evidence demonstrating that enhanced prevention and early intervention MCH home visiting programs are an important investment for improving maternal and child health outcomes throughout the life course. The optimal type of MCH home visiting is a blended model of universal and targeted services. MCH home visiting programs should be guided by the principles and values of human rights, empowerment, equity, transparency, individual responsibility for health, and cultural appropriateness. Public health approaches and community health planning, implementation, and evaluation are necessary for evidenced-based program design and delivery and quality improvement. Professional standards and the development of core competencies for nurses and midwives and other paraprofessionals conducting home visits are needed for MCH home visiting programs to achieve optimal maternal-child health outcomes.

Maternal child health home visiting and outreach services in CEE/CIS have an existing but limited system which is vulnerable to further deterioration unless immediate steps are taken for wider systems reform. While there is a long tradition of MCH home visiting in the region, a lack of evidence-based practice persists. A revitalized MCH home visiting service needs to be centered on enhanced education and training for nurses and midwives. While protocols for MCH home visiting exist and many have been revised, each country and jurisdiction in the CEE/CIS region will need to develop an evidence-based MCH home visiting and outreach program that meets their own specific needs, particularly to support early childhood development, support child protection, provide reproductive health and family planning services, and, provide appropriate programs for vulnerable and marginalized populations. Risk screening and assessment tools are most effective when used as part of prevention and early intervention programs. This is important to highlight for the CEE/CIS region as assessments and screening may cause harm when they lead to inappropriate interventions such as hospitalization or medicalization of psycho-social issues. Issues of access, equity, quality, and intersectoral cooperation and social participation are all limited and need to be enhanced to improve the health and well-being outcomes for mothers and children. Financing schemes that are equity-based can facilitate this process and improve the availability of resources for MCH home visiting in the CEE/CIS region. UNICEF in partnership with other UN Agencies is well positioned to provide long-term support for strengthening MCH home visiting services and to improve maternal and child health and well-being in the region.

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