Georgia Maternal & New-born Health Strategy 2017-2030

Executive Summary

The Government of Georgia has the intention to substantially improve Maternal and New-born Health (MNH) in the coming 14 years. To this end it has developed a long-term strategy (2017-2030) and a closely related short-term Action Plan (2017-2019). Because MNH is closely related and strongly influenced by quality of Family Planning and of Sexual and Reproductive Health of young people, these two fields are also included in this MNH strategy. The overall purpose of this strategy, which is outlined here, is to give direction and provide guidance for the improvement of Maternal and Newborn Health and the related fields just mentioned. This strategy is closely linked to recent international strategic documents, including the Sustainable Development Goals (2015) and the new WHO European Action Plan for Sexual and Reproductive Health (2017-2021) adopted in 2016, with which it shares internationally accepted guiding principles and commitments.

Despite significant progress made over the past two decades, the country still faces several important challenges in meeting international targets in the fields of MNH, FP and Young People´s SRH. The Strategy analyses the main determinants of those challenges and subsequently recommends various priority interventions for dealing with them.

The *objectives* of this strategy are that by the year 2030:

For Maternal and Newborn Health:

Objective1: *Women will have full access to and will utilize evidence-based preconception, antenatal, obstetric, neonatal, and post-partum care that meet their needs*.

Objective 2: *The quality of maternal and neonatal health services will be improved and standardized along with full integration of these services*.

Objective 3: *Awareness and knowledge in the general population about the healthy behaviours, the medical standards of high quality care and the rights of patients who use this will be substantially improved*.

For Family Planning:

Objective 1: *Family Planning services will be easily accessible for all who need them.*

Objective 2: *The quality of family planning services will meet international standards*.

For SRH of Young People:

Objective 1: *Young people will be sufficiently educated on SRH issues to preserve their own health and well-being.*

Objective 2: *Young people will have full access to SRH services that meet their needs*.

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List of Acronyms

ANC:	Ante-Natal Care
BFHI:	Baby-Friendly Hospital Initiative
CPD:	Continuous Professional Development
CPR:	Contraceptive Prevalence Rate
CRVS:	Civil Registration & Vital Statistics
EmOC:	Emergency Obstetric Care
EPC:	Effective perinatal Care
FP:	Family Planning
HIV:	Human Immunodeficiency Virus
IBFAN:	International Baby-Food Action Network
CMD:	Continuous Medical Development
ICD:	International Classification of Diseases
ICPD:	International Conference on Population and Development
ICPD/PoA:	idem/Programme of Action
IDCD:	Ill-Defined Causes of Death
IEDSS:	Integrated Electronic Disease Surveillance System
IUD:	Intra-Uterine Device
JSI:	John Snow Inc.
MCHFP:	Mother & Child Health and Family Planning
MDGs:	Millennium Development Goals
MISP:	Reproductive Health Minimum Initial Service Package
MMEIG:	Maternal Mortality Estimation Interagency Group
MMR:	Maternal Mortality Ratio
MNH:	Maternal and Neonatal Health
NCDC&PH:	National Centre for Disease Control & Public Health
NMR:	Neonatal Mortality Rate
PHC:	Primary Health Care
PMR:	Perinatal Mortality Rate
PPH:	Post-Partum Haemorrhage
RH:	Reproductive Health
RHS:	Reproductive Health Survey
SDGs:	Sustainable Development Goals
SOP:	Standard Operating Procedures
SRH:	Sexual and Reproductive Health
STI:	Sexually Transmitted Infection

TAR:	Total Abortion Rate (mean number of abortions during a woman's lifetime)
TIAR:	Total Induced Abortion Rate
UHP:	Universal Health Programme
UNFPA:	United Nations Population Fund
UNICEF:	United Nations Children's Fund
USAID:	United States Agency for International Development
UTI:	Uterine Tract Infection
WHO:	World Health Organisation
WRA:	Women of Reproductive Age

1. INTRODUCTION

1.1. Rationales for a new Strategy for Georgia

When needs are high and ubiquitous, and resources limited, a decisive and focussed strategy to address Maternal and Newborn survival becomes crucial. Applying life course approach, this document provides a longer term perspective, until the year 2030, on needed improvements in Maternal and Newborn Health (MNH) and some closely related reproductive health issues in Georgia.

Although important progress has been made in some respects in the past decades, Georgia still lags behind in several ways when it comes to reaching internationally agreed targets in this field and compares negatively to European averages for various reproductive health indicators.

In 2015, the Millennium Development Goals (MDGs) officially came to an end, and 2014 was also the final year of the Programme of Action (PoA) that had resulted from the International Conference on Population and Development (ICPD), that had taken place in Cairo in 1994. Both the MDGs and the ICPD/PoA had set targets for the field of Reproductive Health, including that for reducing child mortality (MDG 4) and improving maternal health (MDG 5). According to the targets set for MDGs 4 and 5, the under-five mortality rate should have reduced by 2015, compared to the year 1990, by two thirds and the Maternal Mortality Ratio (MMR) should have declined by three quarters. In 2000, Georgia signed the *UN Millennium Declaration*[1] and developed its own internal targets for achieving the MDGs by 2015. Despite several effective initiatives undertaken by Georgian government to reduce maternal mortality, the MDG 5 target has not been met. In 2015, the MMR (per 100,000 live births) estimated by the UN Maternal Mortality Estimation Interagency Group (MMEIG) was 36,[2] being more than twice as much as the national MDG target of 16. On the other hand, Georgia surpassed its MDG 4 target of 16, reducing under-five mortality rate (per 1,000 live births) from 48 in 1990 to 12 in 2015; during the same period infant mortality rate (IMR; per 1,000 live births) declined from 41 to 11, and neonatal mortality rate (NMR; per 1,000 live births) – from 25 to 7[3]. However, despite the recent downward trends, the MMR, IMR and NMR estimates continue to exceed well above the averages for the European region (16, 5 and 3, respectively, in 2015)[3]. According to the latest available survey data, Contraceptive Prevalence Rate (CPR) has increased since 1999 - the percentage of married women aged 15–44 years who were using contraception increased from 41% in 1999 to 45% in 2005 and 53% in 2010; the use of modern contraceptive methods increased from 20% to 35% (a 75% increase)[4]. However, despite this increase, Georgia continues to have one of the lowest CPRs in Eastern Europe and Eurasia[5]. The Total Induced Abortion Rate (TIAR) in Georgia has declined substantially (from 3.1 in 2002-2005 to 1.6 abortions in 2007-2010 per woman during her lifetime), but at the same time, this latter rate is still double the European average, and it is even one of the highest of the countries of the former Soviet Union, as a result of the unmet need for modern contraception. This high rate is the immediate result of a substantial unmet need for modern contraception. In terms of other indicators, i.e. MDG5b, and in the field of adolescent Sexual and Reproductive Health (SRH), which is a major issue in the ICPD/PoA, progress has almost been negligible in Georgia. Ex. during last years' adolescent (15–19 years) pregnancy rate decreased; although, since 2013, this indicator again has increased and totaled to 48.6 in 2015.[6] Georgia is (with Albania) the ***only*** country in the WHO European region where the teenage birth rate went up since 2000! In the Western European countries this indicator varies from 15 to 25.

[1] United Nations: Millennium Declaration http://www.un.org/en/development/devagenda/millennium.shtml

[2] WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division. Trends in Maternal Mortality: 1990─2015. Geneva: WHO. 2015.

[3] UNICEF, WHO, The World Bank Group and United Nations. UN Inter-agency Group for Child Mortality Estimation. Levels and trends in child mortality 2015. (http://www.childmortality.org/files_v20/download/igme%20report %202015 %20child%20mortality%20final.pdf)

[4] GERHS 2010, p.144

[5] Ibid, p.142

[6] National Centre for Disease Control and Public Health. Health Care; Statistical Yearbook 2015 Georgia.

The MDGs were followed up in 2015 by the Sustainable Development Goals (SDGs), setting goals for the year 2030. By adopting the 2030 Agenda for Sustainable Development[7] and the related Sustainable Development Goals (SDGs)[8], United Nations Member States have confirmed their commitment to *"ensure universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes by 2030"* (Goal 3, Target 7) and to *"ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences (Goal 5, Target 6)"*. These SDGs have recently been worked out for the field of women's, children's and adolescents' health[9]. For the current 15-years period priority areas have been updated, and evidence-based interventions have been recommended to improve maternal and child health, as well as interventions for closely related reproductive health areas (particularly family planning and adolescent SRH). This publication therefore provides guidance for an updated strategy in this field for Georgia; as well as, UNSG new strategy where adolescents have been added in line with SDGs.[10]

In 2006, the Government of Georgia launched its first strategic document on improving Reproductive Health[11], including maternal and child health, for the period up to 2015. However, it did not become an official policy document. This year was chosen as the final year of this policy, because it coincided with the final year of ICPD/PoA and the MDGs. This draft policy document outlined policy measures and other activities for the entire field of reproductive health, and it included indicators and targets to be reached by 2010 and 2015 respectively. Some of those targets had more or less been reached by 2015, but others turned out to have been (far) too ambitious. It should be stressed that in many respects this 2006 policy is still very relevant, because several recommended activities described in it have not, or not sufficiently been implemented by 2016, with corresponding lack of results. Several elements of it are therefore (again) included in this strategy, where appropriate in an adapted manner. Furthermore, in 2006, a costed action plan with clearly marked timelines for implementation was not developed to facilitate resource mobilisation, monitoring and evaluation, and scaling up of the proposed interventions.

The Georgian Parliament recently adopted *The Demographic Security Policy* for the years 2017-2030. This builds on national efforts and achievements and lessons learned from all sectors. One of the objectives of this Policy is "*Universal access to reproductive health care services, information and education".* The document also states that "*Under the current demographic regime of increased life expectancy, high level of emigration and relatively high fertility that characterizes Georgia, the most relevant priorities of the national health care system with regard to fertility and reproductive health include the following: early diagnosis and timely treatment of breast and cervical cancer; identification and response to various reproductive health risks; improved access to quality RH services, including those oriented towards youth, maternal and child care services; improved management and prevention of complicated pregnancy and childbirth; and prevention of induced abortion by increased access to the modern family planning methods."* The current strategy works out several of these priorities.

Finally, it is important to mention that in September 2016, the 66th session of the World Health Organisation (WHO) Regional Committee for Europe adopted an Action Plan for Reproductive

[7] Transforming our world: the 2030 agenda for sustainable development. In: Sustainable Development Knowledge Platform [website]. New York: United Nations; 2016 (https://sustainabledevelopment.un.org/post2015/transformingourworld).

[8] United Nations General Assembly resolution A/RES/70/1. Transforming our world: the 2030 Agenda for Sustainable Development. New York: United Nations; 2015 (http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/1&referer=http://www.un.org/en/ga/70/resolutions.shtml&Lang=E).

[9] The global strategy for women's, children's and adolescents' health (2016–2030): survive, thrive, transform. Geneva: World Health Organization; 2015 (http://www.who.int/life-course/partners/global-strategy/global-strategy-2016-2030/en/).

[10] http://www.who.int/pmnch/media/events/2015/gs_2016_30.pdf

[11] Ministry of Labour, Health & Social Affairs, Georgia National Reproductive Health Policy. Tbilisi, Georgia – Dec 2006

Health in Europe (2017-2021)[12]. This Action Plan is developed in close collaboration with all 53 member states of the WHO European Region, Georgia being one of them. It is closely connected to the main policy documents for Europe, in particular "Health 2020"[13], to ICPD PoA and to the SDGs that are relevant for this field[14]. This Action Plan will partly replace the 2001 WHO Regional Strategy on Sexual and Reproductive Health[15], which had mainly been developed in response to the ICPD PoA. The current strategy for Georgia has greatly benefitted from this European Action Plan and is aimed at supporting its implementation in Georgia.

In summary, a new forward looking document in the area of Reproductive Health (with a special emphasis on MNH) is not only needed because Georgia is still facing several important challenges in this field that have not been sufficiently addressed until now. Such a policy document is also needed to keep up with national and international developments and with target setting and supporting documents in this field.

1.2. Purpose and scope of this strategy

The overall purpose of this document is to provide strategic inputs that will support the development and execution of operating plans at the country level to accelerate the reduction of maternal and neonatal mortality in Georgia by strengthening and expanding policies and programs for the improvement of Maternal and Newborn Health (MNH) within the continuum of care. To this end, this strategy also gives direction and provides guidance for the fields of Family Planning and Adolescent SRH as very important determinants of MNH.

Reducing maternal and neonatal mortality requires coordinated long term efforts. Many factors affect the ability of women and newborns to survive pregnancy and childbirth. It is increasingly recognized that high rates of maternal and newborn mortality are the result of problems in the health sector. However a variety of other issues related to gender, socio-cultural values, and the economic circumstances of households, communities and national political will also contribute to the high rates of maternal and newborn mortality. Other factors which also contribute to maternal and newborn deaths are: delays in recognizing problems, deciding to seek care, reaching care and receiving care. All aforementioned factors are the major elements of "Three delays" described in Thaddeus and Maine's model[16] and still present real challenges facing pregnant women and newborns in Georgia. Therefore, collective and creative strategies are needed to mobilize resources and generate popular support and political will that are critical to bringing about changes at multiple levels and achieving sustainable improvements in maternal and newborn health.

At ICPD (Cairo 1994) a definition of Reproductive Health was adopted, which is still the international standard. This definition indicates that reproductive health includes three overlapping areas: sexual health, family planning and mother & new-born health. The same definition has also been the starting point of the 2006 Georgia policy mentioned above. The same starting point has led to the conclusion that family planning and adolescent SRH (a very important topic in ICPD/PoA) should be integrated in this strategic document on maternal and newborn health. Family planning is not only the right of parents to decide on the number and spacing of their children, but is also an important strategy for reducing the burden of unintended pregnancies and thereby incidence of induced abortion and abortion-related morbidity and mortality. Adolescents are more likely to engage in unprotected sex, which can result in sexually transmitted infections (STIs) or pregnancy, most of which are unwanted

[12] Action plan for sexual and reproductive health: towards achieving the 2030 Agenda for Sustainable Development in Europe – leaving no one behind. WHO Regional Office for Europe, 1 August 2016, Copenhagen.

[13] Health 2020: a European policy framework and strategy for the 21st century. Copenhagen: WHO Regional Office for Europe, 2013 (http://www.euro.who.int/ en/publications/policy-documents/health-2020.-a-european-policy-frameworkand-strategy-for-the-21st-century-2013).

[14] See note 3.

[15] WHO regional strategy on sexual and reproductive health. Copenhagen: WHO Regional Office for Europe; 2001 (EUR/01/5022130; http://www.euro.who.int/ en/health-topics/Life-stages/sexual-and-reproductive-health/publications/pre2007/who-regional-strategy-on-sexual-and-reproductive-health).

[16] Thaddeus S, Maine D. Too far to walk: maternal mortality in context. Soc Sci Med 1994; 38: 1091-1110

and are more likely to end in induced unsafe abortions, particularly among those who are around 20 years old[17]. It should be stressed that, for a broad variety of reasons, Family Planning and Adolescent SRH have until now remained relatively neglected fields in Georgia that urgently need to be brought in focus in the coming years in view of life-course approach to reproductive health.

Some (sub-) areas of reproductive health are not taken into account in this strategy as separate topics, in some cases because they have already been dealt with in other forward looking documents or because up to date and evidence-based recommendations for policy and practice are available. These areas are specifically: sexual health promotion in general; men's SRH; infertility; and reproductive tract infections and Cervical & breast cancer[18]. The issue of induced abortion is to some extent included in the paragraph on Family Planning.

The executive plans that are developed in light of this Strategy will serve as a general framework for the MNH/RH/FP program and as a guide for interventions for the next three years, and they will provide a baseline for indicators used to measure the performance and activity implementation envisioned by the three-year action plan.

In general, the MNH Strategy seeks to:

- Create harmony in the national efforts and guide them towards contributing to country development and increasing national commitment to MNH/RH/FP issues.
- Ensure the provision and sustainability of the necessary human and financial resources to support MNH/RH/FP programmes and initiatives and consider it as a national priority.
- Reduce the gap between what is planned for in the area of MNH/RH/FP and what can be implemented at the level of programmes and services, and reinforce the role of policies in creating an enabling environment to support programme implementation.
- Provide performance indicators to measure improvement between the current status and the long-term goals.

1.3. Vision

By 2030 there will be no preventable deaths of mothers and newborns or stillbirths, every child will be a wanted child, and every unwanted pregnancy will be prevented through appropriate education and full access for all to high quality services.

1.4. Goal

The goal of the strategy is to maintain and expand the coverage of evidence-based, high impact and cost-effective interventions for maternal and newborn survival, as well as for immediately related reproductive health fields, and to guarantee access to those services for all who need them.

1.5. Targets

- Reduction of Maternal Mortality Ratio from the current 32 per 100,000 live births to 12 in 2030.
- Reduction of Neonatal Mortality Rate from the current 6.1 per 1,000 live births to 5 in 2030.
- Reduction of the unmet need for modern contraception from the current 31% to below 15% by 2030.
- Reduction of the Total Induced Abortion Rate (TIAR; i.e. average number of abortions during a woman's lifetime) from the current 1.6 to below 0.5 by 2030.

[17] Christine Winkelmann and Evert Ketting, Sexual Health of Young People in the WHO European Region. Bundeszentrale für gesundheitliche Aufklärung, Köln 2016 (forthcoming)

[18] UNFPA & European Cervical Cancer Association (ECCA). Capacity Assessment and Recommendations for Cancer Screening in Georgia. Tbilisi, January 2015.

- Reduction of the Teenage Pregnancy Rate (TPR) from the current 51.5 per 1,000 women aged 15-19 to < 20 by 2030.

1.6. Objectives:

For Maternal and Newborn Health:

Objective 1: *By 2030 women will have full access to and will utilize evidence-based preconception, antenatal, obstetric and neonatal, and post-partum care that meet their needs.*

Objective 2: *By 2030 quality of maternal and neonatal health services will be improved and standardized along with full integration of these services.*

Objective 3: *By 2030 awareness and knowledge in the general population about the healthy behaviors and medical standards of high quality care and the rights of patients who use this will be substantially improved.*

For Family Planning:

Objective 1: *By 2030 Family Planning services will be easily accessible for all who need them.*

Objective 2: *By 2030 the quality of family planning services will meet international standards.*

For SRH of Young People:

Objective 1: *By 2030 young people will be sufficiently educated on SRH issues to preserve their own health and well-being.*

Objective 2: *By 2030 young people will have full access to SRH services that meet their needs*.

1.7. Guiding principles

This strategy is closely linked to the aforementioned international strategic documents, that all have been guided by the same internationally accepted principles that are relevant for the area of Reproductive Health:

1. Human rights

The current Strategy is based on established human rights treaties and commitments. Women's, children's and adolescents' health are recognized as fundamental human rights in several international treaties such as the International Covenant on Economic, Social and Cultural Rights (1966), the Convention on the Elimination of All Forms of Discrimination against Women (1979) and the Convention on the Rights of the Child (1989). It also builds on global-level consensus, including the International Conference on Population and Development Programme of Action (ICPD, Cairo 1994); the Beijing Declaration and Platform for Action agreed at the Fourth World Conference on Women (Beijing 1995). Health is a human right under international law that is interdependent with, and indivisible from, other human rights. Key human rights interventions include those in the areas of policy and legislation, equality and non-discrimination, service delivery, participation, the underlying determinants of health, sociocultural, political and economic affairs, and accountability. In addition to fulfilling legal obligations, there is evidence that using a human rights-based approach has a positive impact on women's, children's and adolescents' health.

2. Gender equality and gender sensitiveness

Gender equality for women and girls is an essential prerequisite for making informed choices about their health and to seek and receive services they want and need. Women facing discrimination because of their gender identity or sexual orientation, often have unequal access to, and uptake of, basic health services and resources. Unequal gender norms and gender stereotypes also create biases in policies, institutions and programming, with grave consequences for effectiveness of services. Removing discrimination and ensuring women and adolescent girls are aware of their rights and are able to demand gender sensitive and stigma- and discrimination-free services, is fundamental; strengthening male support and engagement for achieving substantial gender equality will contribute to improved status of sexual and reproductive health and rights of women, men and young people;

Furthermore, the collection of sex-disaggregated data and gender-sensitive indicators is essential to monitoring and evaluating the results of health policies and programmes. Gender-responsive health policies and interventions require a thorough analysis of barriers to the achievement of women's health. Enabling environments for gender equality are inextricably linked to positive health and broader societal outcomes. Successful implementation a reproductive health strategy requires an effective response to unequal gender norms.

3. Life-Course Approach to Reproductive Health

The reproductive and sexual health care needs of women are not limited to their child-bearing years. Addressing the health needs and priorities throughout the life-course of both men and women can either contribute to or hinder enjoyment of a safe, satisfying sex life and the ability of women to bear healthy children and maintain their own health at the same time. Reproductive and health needs of women and men differ in accordance with their age. Experiences affecting reproductive health at earlier ages often have lasting repercussions later in life. Life-course approach is an essential step towards the implementation of Health 2020 and the goals and targets in the United Nations 2030 Agenda for Sustainable Development.[19]

4. Quality of care

Quality is something which cannot be compromised in Georgia today's context. Quality inadequacies invariably affect cost effectiveness and finally service utilization patterns. Therefore, quality should be an inbuilt component of all service delivery programmes ensuring adherence to standards, privacy, safety, technical soundness, client/patient friendly services, accountability and continuum of care.

5. Other guiding principles

In line with the forthcoming European Action Plan for Sexual and Reproductive Health, the following guiding principles will also be observed:

- Consistency with the vision, policies and priorities of Health 2020 (WHO European Region);
- Action based on the best available evidence;
- Emphasis on prevention, health promotion, and community participation and empowerment;
- People-centred care.

[19] The Life-course Approach in the Context of Health 2020; WHO, Minsk declaration http://www.euro.who.int/__data/assets/pdf_file/0009/289962/The-Minsk-Declaration-EN-rev1.pdf

2. MATERNAL AND NEWBORN HEALTH

2.1. Epidemiology of maternal and newborn health

Globally, approximately 800 women and 7,700 newborns die each day from complications during pregnancy, childbirth and other neonatal causes. In addition, 7,300 women experience a stillbirth.[20] Obstetric causes, notably, hemorrhage (27%), hypertensive disorders (14%), and sepsis (11%), continue to account for a large proportion of maternal deaths.[21] The increasing importance of the indirect causes of maternal death contributing to between a quarter to over half of maternal death is a matter of concern.[22] Newborn deaths now account for 44% of all deaths in children under 5 globally.[23] Almost 1 million neonatal deaths occur on the day of birth, and close to 2 million die in the first week of life. Of an estimated 2.64 million stillbirths globally, 40% of stillbirths – 1.2 million a year- occur intrapartum. Preterm birth (35%), intrapartum-related causes (24%) and severe infections (20%) are the leading direct causes of neonatal deaths.[24] Almost 80% of newborn deaths occur among babies who weigh less than 2500g at birth, especially those born preterm.[25] Many preterm babies die within the first month, making prematurity the leading cause of newborn death globally,[26] and those who survive beyond their first month of life are prone to a lifetime of disabilities.[27]

Cost-effective and high-impact interventions based on sound scientific evidence are currently available that make most maternal and neonatal deaths preventable. Ending preventable maternal and newborn mortality remains one of the world's most critical challenges in the new 2030 Agenda for Sustainable Development.[28]

There is a crucial need in Georgia to accelerate the reduction of maternal and neonatal mortality to attain the Sustainable Development Goals. Maternal and infant mortality are widely regarded as key indicators of population health and of social and economic development. Improving health and the well-being of mothers and newborns is an important public health goal for Georgia. Maternal and newborn health (MNH) addresses a broad range of conditions, health behaviors, and health systems indicators that affect the health, well-being, and quality of life of women, children and families. The health outcomes for mothers and their newborns and children are inextricably linked; maternal deaths and morbidities impact newborn and child survival, growth, and development. Therefore, a vital part of the National MNH Strategy is to ensure improved coordination of interventions and to encourage the integration of service delivery for both across the continuum of care by forging strong, collaborative and sustainable partnerships within and beyond the health sector.

Over the past decades, Georgia has made great strides in reducing maternal and neonatal mortality; however the progress has been slower for mothers. According to the MMEIG estimates, the MMR has declined from 60/100,000 live births in 2000 to 36/100,000 live births in 2015, yet being still more than double the national MDG 5 target of 16 and the similar average level for the European region.

[20] WHO. World Health Statistics 2014. Geneva: World Health Organization, 2014 .

[21] Say L., Chou D., Gemmill A., Tuncalp O., Moller A., Daniels J., et al., Global Causes of Maternal Death: a WHO Systematic Analysis. Lancet Global Health. 2014. http://dx.doi.org/10/1016/52214-109x(14)70227-x.

[22] Souza JP, Tunçalp Ö, Vogel JP, Bohren M, Widmer M, Oladapo OT, et al. Obstetric transition: the pathway towards ending preventable maternal deaths. BJOG: An International Journal of OB&GYN. 2014;121(Suppl. 1):1–4.

[23] UN Inter-agency Group for Child Mortality Estimation. Levels and trends in child mortality 2015. _ http://www.childmortality.org/files_v20/download/igme%20report %202015 %20child%20mortality%20final.pdf

[24] Liu L, Oza S, Hogan D, et al. Global, regional, and national causes of child mortality in 2000-13, with projections to inform post-2015 priorities: an updated systematic analysis. Lancet2015;385:430-40.

[25] Lawn JE, Blencowe H, Oza S, et al. Every Newborn: progress, priorities, and potential beyond survival. Lancet 2014;384:189-205.

[26] March of Dimes, PMNCH, Save the Children, WHO. Born Too Soon: The Global Action Report on Preterm Birth. Geneva: World Health Organization, 2012.

[27] Lawn J.E., Kinney M.V., Black R.E., Pitt C., Cousens S., Kerber K., et al. Newborn Survival: a Multi-country Analysis of a Decade of Change. Health Policy Planning. 2012; 27 Suppl. 3:iii6-28. Epub. 2012/06/22.

[28] WHO. Health in 2015: From MDGs to SDGs. Geneva 2015 http://www.who.int/mediacentre/news/releases/2015/mdg-sdg-report/en/

For the same period, based on the latest estimates of the UN Inter-agency Group for Child Mortality Estimation (IGME), the under-5 mortality rate in Georgia has declined from 48/1,000 live births in 1990 to 12/1,000 live births in 2015, thus surpassing the national MDG target of 16/1,000 live births; particular progress has been made in reducing the infant mortality rate (IMR; per 1,000 live births) - from 41 to 11, and the neonatal mortality rate (per 1,000 live births) - from 25 to 7[29], with both being in 2015 the lowest ever recorded as was the officially reported stillbirth rate of 9.7/1000 births (after 22 weeks of gestation).[30] Despite these downward trends, the IMR, neonatal mortality and stillbirth rates still exceed that for the European region (5, 3 and 3.4, respectively).[25] The Georgia's neonatal death rate ranks sixth among post-soviet countries, although it is lower than that in the neighboring countries, such as Armenia, Azerbaijan and Central Asian Republics.[31] The share of neonatal deaths in both under-5 and infant mortality of 60% and 70%, respectively, still remains high. On the other hand, the share of early neonatal mortality in all neonatal deaths reached the lowest level during the last decade in 2015, and was 58%.[26]

The leading causes of maternal and newborn death in Georgia are largely consistent with the global cause-specific pattern of maternal and neonatal mortality.[26,32] Although, the immediate medical causes of maternal, fetal and neonatal deaths differ, the underlying causes of these deaths are very similar. Many of the conditions that result in complications for the mother during pregnancy, delivery, and after delivery also result in complications for the baby.

According to the official data, in Georgia in 2015, direct, indirect and unspecified causes of early maternal deaths (19, 90%) that occurred during pregnancy or 0-42 days after the pregnancy termination, shared 58%, 26% and 16%, respectively, with obstetric hemorrhage (21%) and infection (11%) being the leading direct causes of early maternal mortality, followed by hypertensive disorders (5%), and embolism (5%). The late maternal deaths (2, 10%) that occurred within 43-365 days postpartum were due to the indirect obstetric causes.

It is noteworthy that with the introduction of the WHO recommended evidence-based Effective Perinatal Care approaches in 2006 (JSI/USAID), and, thus, the revolutionary reform of maternity care in Georgia, the magnitude and the rank order of the leading direct causes of maternal death have notably changed over the last decade. Specifically, share of PPH in maternal mortality has reduced, which is largely attributable to the use of the Active Management of the Third Stage of Labour in the routine obstetric practice.[33] Similarly, post-abortion complications has been declined mainly due to the significant reduction of TIAR (from 3.1 in 2005 to 1.6 in 2010) and some improvements in post-abortion care (PAC) practices through the donor-supported programs (UNFPA, JSI/USAID).[28,29]

On the other hand, maternal sepsis remains a significant cause of maternal mortality in Georgia. Factors predisposing women to puerperal infections include anemia, poor nutrition, prolonged labour with frequent vaginal examinations, and premature ruptured membranes.[34] A growing body of evidence identifies caesarean section as the single most important risk factor for the development of puerperal sepsis.[35] During the last decade the rate of cesarean section in Georgia rose by almost 50% and in 2015, reached as high as 41%, being almost double that for the European Region and the Commonwealth of Independent States (CIS) countries.[28] Of particular concern is increase in a primary

[29] UNICEF, WHO, The World Bank Group and United Nations. UN Inter-agency Group for Child Mortality Estimation. Levels and trends in child mortality 2015. (http://www.childmortality.org/files_v20/download/igme%20report %202015 %20child%20mortality%20final.pdf)

[30] National Centre for Disease Control and Public Health. Health; Statistical Yearbook 2015 Georgia. Ministry of Labour, Health and Social Affairs, Tbilisi 2016.

[31] Georgian perinatal health report. MoLHSA, 2015

[32] WHO. Maternal Mortality 2015 http://www.who.int/mediacentre/factsheets/fs348/en/

[33] GERAMOS2014

[34] AbouZahr C., Aahman E., Guidotti R. Puerperal Sepsis and Other Puerperal Infections. In: Murray C., Lopez A., editors. Health Dimensions of Sex and Reproduction: The Global Burden of Sexually Transmitted Diseases, Maternal Conditions, Perinatal Disorders, and Congenital Anomalies. Geneva: WHO; 1998.

[35] Smaill F. Hofmeyr G.J. Antibiotic Prophylaxis for Cesarean Section. Cochrane Database Systematic Review. 2002(3):CD000933. Epub. 2002/07/26.

caesarean section, constituting over half (55%) of all caesarean deliveries in Georgia and being largely medically unjustified.[28]

Attention has recently focused on the high tall of the indirect causes of death described in the concept of "obstetric transition,"[36] in which the primary causes of maternal death shift toward communicable and non-communicable diseases as fertility and maternal mortality ratios decline. Infectious diseases, including STIs and urinary tract infections (UTIs), and non-communicable diseases (hypertension, diabetes) have serious consequences for both maternal and neonatal morbidity and lead to poor outcomes including prematurity, small size for gestational age, infections, stillbirth, and early neonatal death[37]. There is a need in Georgia to strengthen the recognition and management of indirect causes of maternal death, and coordinate with other relevant sectors and health providers to address care for communicable and non-communicable diseases, develop innovative education, screening and management approaches for these conditions, as well as adherence to appropriate clinical guidelines and protocols.[38]

The key factors behind neonatal mortality and morbidity in Georgia are preterm birth, fetal growth restriction and congenital anomalies, as are the external factors such as social, behavioral and cultural determinants of health. Variables associated with prematurity include a woman's age at pregnancy, multiple pregnancies, short birth intervals, smoking and non-medically indicated caesarian sections[39].

Evidence shows that, adolescent mothers' (<20 years of age) babies are more likely to have low birth weight and/or be born prematurely, with perinatal death risk among these babies being 50% higher compared to those born to adult mothers.[40]

Based on the official data, in Georgia in 2015, the majority of neonatal deaths (75%) occurred in preterm babies, with 71% being premature by gestation age and 56% by birth weight (<2500g). Similarly, of all stillbirths, 71% occurred before term pregnancy (< 37 weeks of gestation), mostly in extremely preterm births (22-27 weeks, 35%), while 26% occurred in full term births (at or after 37 weeks). Overall, high proportion (62%) of late fetal loss (≥28 weeks of gestation) is a matter of concern. It is noteworthy that of all stillbirths, 82% occurred in antenatal period and 14% occurred during the childbirth. By comparison, estimated intrapartum stillbirth in developed world varies between 4-10% of all stillbirths.[41] Maternal infections, pre-eclampsia/eclampsia, and hypertension contribute to the toll of stillbirth.[42,43,44] The majority of effective interventions that improve maternal health and reduce maternal mortality will also reduce stillbirths and premature births. Specific approaches to prevent stillbirth (both antenatal and intrapartum) and also preterm birth are: screening for and management of STIs, high blood pressure, and diabetes; education for smoking cessation; targeted care of women at imminent risk of preterm birth, including an adequate management of pre-eclampsia/eclampsia; emergency obstetric care and the appropriate use of induction and cesarean

[36] Souza JP, Tunçalp Ö, Vogel JP, Bohren M, Widmer M, Oladapo OT, et al. Obstetric transition: the pathway towards ending preventable maternal deaths. BJOG: An International Journal of OB&GYN. 2014;121(Suppl. 1):1–4.

[37] Chan G.J., Lee A.C., Baqui A.H., Tan J., Black R.E. Risk of Early-Onset Neonatal Infection with Maternal Infection or Colonization: a Global Systematic Review and Meta-analysis. PLoS Med. 2013; 10(8):e1001502. Epub. 2013/08/27.

[38] Strategies toward ending preventable maternal mortality. Geneva: World Health Organization; 2015 (http://who.int/reproductivehealth/topics/maternal_perinatal/epmm/en/, accessed 21 July 2016)

[39] March of Dimes, PMNCH, Save the Children, WHO. Born Too Soon: The Global Action Report on Preterm Birth. Geneva: World Health Organization, 2012.

[40] WHO. Adolescent pregnancy. 2014

[41] European Perinatal Health Report. Health and Care of Pregnant Women and Babies in Europe in 2010

[42] Lassi Z.S., Majeed A., Rashid S., Yakoob M.Y., Bhutta Z.A. The Interconnections between Maternal and Newborn Health – Evidence and Implications for Policy. Journal of Maternal and Fetal Neonatal Medicine. 2013 May; 26 Suppl. 1:3-53. doi: 10.3109/14767058.2013.784737.

[43] Lassi Z.S., Mansoor T., Salam R.A., Das J.K., Bhutta Z.A. Essential Pre-pregnancy and Pregnancy Interventions for Improved Maternal, Newborn and Child Health. Reproductive Health 2014, 11(Suppl. 1):S2 http://www.reproductive-health-journal.com/content/11/S1/S2.

[44] Salam R.A., Mansoor T., Mallick D., Lassi Z.S., Das J.K., Bhutta Z.A. Essential Childbirth and Postnatal Interventions for Improved Maternal and Neonatal Health. Reproductive Health 2014, 11(Suppl. 1):S3 doi:10.1186/1742-4755-11-S1-S3.

section[45]. Guidance will also be needed regarding the use of antenatal corticosteroids for women at risk of preterm birth.[46.]

Congenital anomalies were the second leading cause (20%) of neonatal death after prematurity in Georgia for the same year, with cardiac and nervous system related anomalies being most common. Improving primary prevention, early detection and better management of congenital anomalies, including pregnancy termination before 22 weeks of gestation, can reduce associated neonatal mortality.

Prevention of congenital syphilis and mother to child transmission (PMTCT) of HIV is an important component of the response to reduce maternal and newborn morbidity and mortality. HIV prevalence among pregnant women in Georgia is lower (0.04%) than in general population (0.07% in 2013). Universal screening of all pregnant women for HIV; provision of preventive ARV treatment to all HIV positive pregnant; and providing preventive ARV therapy and social care to all newborns along with the improvement of the quality of PMTCT program are key priority interventions of the National HIV/AIDS Strategy 2016-2018. The linkage of MNH program with the National HIV/AIDS and STI programs will scale up in-country coordinated preventive efforts towards the elimination of congenital syphilis and new HIV infections among newborns and keeping their mothers alive.

Essential to understanding the immediate and underlying causes of deaths and developing evidence-informed, context-specific program interventions to avert future deaths, is the ability to count every maternal and newborn death. In order to continue to accelerate progress toward ending preventable maternal and neonatal deaths, it is critical to ensure that every pregnant woman and every newborn has access to and receives good quality care and life-saving interventions. These interventions can best be delivered by trained health providers in facilities that are able to provide the required level of specialized care (i.e., implement a perinatal care regionalization policy nationwide). Investing in the implementation of these interventions gives triple return; care around the time of birth saves mothers, their newborn babies and prevents stillbirths and disability. Interventions delivered around the time of birth have the greatest potential (41% of all newborn deaths and 70% of stillbirths averted), followed by care of small and sick newborn babies (30%).[47]At the same time, support the mother–baby relationship and integration of maternal health services with newborn health, family planning, infectious and non-communicable diseases and nutrition is a priority to promote cost-effective and client friendly services. Quality of care in delivering these services along the continuum of care during pre-pregnancy, antenatal, intra-partum, childbirth and post-natal periods with back-up support through referral mechanisms is paramount to achieve and sustain desired change.[48] On the other hand, high-functioning MNH health programs must address the impact of social determinants of health on maternal and newborn mortality. Poverty and inequality undermine maternal and newborn care through numerous pathways, including poor maternal diets, inadequate housing and sanitation, low education levels, or gender discrimination, and compromise access to functional health systems. Health communication and other behavior change interventions are essential to enhance knowledge of maternal and newborn care and family planning and improve household behaviors and care seeking for potentially life-threatening complications, thereby prevent significant delays and unnecessary deaths. Through a programmatic framework supporting demand, sustainable service quality, and an enabling environment, Georgia will support the integrated strategies to improve maternal and newborn health.

[45] Goldenberg R.L., Culhane J.F., Iams J.D., Romero R. Epidemiology and Causes of Preterm Birth. Lancet. 2008; 371(9606):75-84. Epub. 2008/01/08.

[46] Althabe F., Belizán J.M., McClure E.M., Hemingway-Foday J., Berrueta M., Mazzoni A., et al. A Population-based, Multifaceted Strategy to Implement Antenatal Corticosteroid Treatment Versus Standard Care for the Reduction of Neonatal Mortality due to Preterm Birth in Low-income and Middle-income Countries: the ACT Cluster Randomised Trial. Lancet. 10.1016/ S0140-6736(14)61651-2. 20. 2014/10/15.

[47] Bhutta ZA, Das JK, Bahl R, Lawn JE, Salam RA, Paul VK. et al. Every Newborn: Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost? Lancet. 2014;384(9940):347–70. doi: 10.1016/S0140-6736(14)60792-3.

[48] United Nations Children's Fund, Committing to Child Survival: A Promise Renewed progress report 2015, UNICEF, New York, 2015.

2.2. Development and current status of maternal and newborn health care in Georgia

Georgia is a high middle-income country with about 3.7 million population. The country has undergone a series of health care reforms following the dissolution of the Soviet health care system with special emphasis made on strengthening maternal and child health and improving access to health care services. Nevertheless, despite the progress that has been achieved over the past 20 years, significant challenges remain in many areas related to the maternal and newborn health.

1. Government and Stewardship

In December 2014, the Government approved the Georgian Healthcare System State Concept for 2014-2020 which includes the fundamental principles for the development of the healthcare sector of the country, such as universality, sustainability, cost effective and transparent governance and the consolidation of interagency cooperation for healthcare purposes. [49]

The national healthcare policy relies on fundamental values, such as the protection of human rights and justice, which, in addition to other areas, involves tackling inequities in access to healthcare services and granting rights to participate in decision-making processes. It involves both epidemiologic, social and economic realities and internationally recognized political declarations and platforms for action in healthcare.

The basis of the above values, principles and arguments are internationally and nationally recognised political declarations and platforms for action, of which the most important are the Universal Declaration of Human Rights; the Millennium Declaration and approved healthcare goals; the Declaration of Alma-Ata on Primary Healthcare; an action plan within the framework of the International Conference on Population and Development (Cairo Programme of Action); the Constitution of the WHO and the Health 2020 platform of the WHO Regional Office for Europe; the Adelaide Statement on Health in All Policies; the Paris Declaration for the effective harmonisation of assistance in the international development; the Political Declaration on Social Determinants (the Rio Declaration), and others.

At the national level, the concept is based on the following political and legal documents: the Socio-Economic Development Strategy 'Georgia 2020'; obligations undertaken by Georgia under the EU-Georgia Association Agreement; the governmental program for 2012, 2013 and 2014 'For Strong, Democratic, United Georgia'; the Law of Georgia on Health Care, the Law of Georgia on Public Health, the Law of Georgia on Medical Activities, the Law of Georgia on Patient Rights and subordinate acts based thereon; the national health care policy and the strategy for its implementation in 2000-2009; the national health care strategy for 2011-2015 'Access to Quality Health Care'; and the Report on the Assessment of Health Care System Effectiveness for 2013.

The concept defines the Universal Health Coverage (UHC), introduced by the Government of Georgia in 2013, as a pillar for the development of the health system in the country and prioritizes Maternal and Child Health.

Over the last decade, the government made significant efforts to improve maternal and child health care in the country. This was done under the ongoing general healthcare reforms as well as through reforms addressing maternal and child health in particular. Several state funded maternal and child healthcare programs have emerged related to antenatal care provision; identification and management of high-risk pregnancies; early detection of congenital anomalies; screening of pregnant women for HIV, hepatitis B and C, and syphilis; free provision of folic acid and iron supplements for pregnant women; free childbirth and caesarean section services as part of UHC. Further, the UHC program covers all health needs of children (0-18 years).[50]

[49] The Georgian Healthcare System State Concept 2014 – 2020 "Universal Healthcare and Quality Management for Protection of Patients' Rights", pg.8, Government of Georgia Ordinance No 724, December 26, 2014. https://matsne.gov.ge/en/document/view/2657250

[50] Maternal and Child Health Programs. 2015. National Center for Disease Control and Public Health of Georgia.

The Ministry of Labour, Health and Social Affairs (MoLHSA) is currently responsible for developing and implementing national health care policy and strategy, drafting healthcare laws and enacting regulations, developing and overseeing the national public health programs, advocating for adequate resource allocation for the healthcare programs from the state budget; and regulating healthcare professions, health facilities and pharmaceutical market.

Yet, evidence-based health policy elaboration process still needs to be developed in the sector. Ongoing state programs and financial resources allocated for the implementation of maternal and child health programs are mostly defined by case planning system. In addition, surveys on provided services or level of patients' satisfaction are not carried out on medical facility level. An integrated system for monitoring and evaluation of the state programs needs to be elaborated and enforced.

Today, the LEPL State Regulation Agency for Medical Activities (SRAMA) under the MoLHSA ensures protection of the patients' rights in terms of the quality of healthcare services. However, a regular analysis of legislative environment and patients' needs assessment will be required to address identified gaps and implement more effective response mechanisms.

Besides, the regulations on medical facilities licensing/permit and accreditation have to be revisited, primarily with regards to infrastructure and human resources, in order to ensure compliance of the integrated model of medical service with internationally recognized criteria

Further, the undergraduate medical education being under the responsibility of the Ministry of Education prevents the MoLHSA from assessing the quality of curricula and the teaching process that has to be addressed as well.

2. Health Care Financing

Since independence the health care system of Georgia is in a regular reform state. Consequently, over the last two decades the Georgia's health care financing system has undergone profound reforms involving massive privatization of the health infrastructure in the country. Following the elections of October 2012, the government of Georgia introduced the basic universal health service package in February 2013. The extension of entitlements has been backed up by a 90% increase in levels of public funding for health from 1.8% of GDP in 2012 to 3% in 2015. The Universal Health Care Program (UHC) covers a wide spectrum of services for Georgian population, including the four antenatal visits for pregnant women, maternity care (both physiological and surgical) and care for all children 0-18 years. The UHC coverage is an important initiative to ensure equity and improve access to and utilization of health services. As a result, the share of out-of-pocket expenditure significantly decreased from 79% in 2012 to 57% in 2014,[51] protecting each citizen from catastrophic expenditures on health, including that for maternal and newborn care.

A top priority of the government is to further improve the health financing system, which is reflected in a remarkable increase in state allocations for the healthcare sector. The government plans to continue the politics of ensuring every citizen with access to basic health benefit package by gradual increase of the package of healthcare services, investment of more financial resources in different preventive services in order to increase the primary, secondary and tertiary prevention of serious diseases to reduce the burden of population morbidity and mortality, as well as financial support of maternal and child health medical service full cycle in addition to 4 antenatal care visits and at least one screening visit; HIV, hepatitis B and syphilis screening, and antiretroviral treatment for mothers; services for children from 0-1 (including neonates); antenatal genetic screening (triple test and amniocentesis); delivery, for all women; screening of newborns and children for hypothyroidism, phenylketonuria, hyperphenylalaninemia and cystic fibrosis; hearing screening for newborns (only Tbilisi) already covered under the MCH vertical programs.

Despite this success, proper financing and value based provider payment mechanisms still need to be established.

[51] http://www.moh.gov.ge/index.php?lang_id=GEO&sec_id=29&info_id=2763

Service delivery

Good maternal and neonatal health necessarily depends on a functioning health system. Such health systems are crucial for promoting health, saving lives and preventing disability in the short term and are essential for long-term sustainability.

Women need to be counselled about the risk of pregnancy and the availability of appropriate family planning methods. Once pregnant, they should be monitored by multi-disciplinary teams, and should have delivery plans in well-equipped maternity units. They should be followed-up in the early puerperium through postnatal care and kept under observation preferably beyond 42 days postpartum.

In order to improve geographical access to health care services, in 2013 the government constructed and equipped 82 new outpatient facilities in different municipalities of Georgia. During 2010-2013, 150 medical hospitals were built/rehabilitated in the country. In 2013, a census of medical facilities in the whole country was carried out, followed by the development of detailed passports of 1,553 healthcare facilities containing information regarding the volume of infrastructure, human and administrative resources.[52]

Currently, MCH services are concentrated in 110 specialized networks of OB/GYN specialty facilities, such as women's consultation centers and maternity hospitals. Over 90% of these facilities are private and most commonly are part of private hospital networks. Although antenatal care coverage with four full visits is relatively high (84.6%) in Georgia, there are discrepancies between rural and urban residents in the initiation of the first visits before 12 weeks of pregnancy (86% vs 93%)[53]. This could be determined by the low level of awareness of the population about the importance of antenatal care and probably there should be a correlation between this variable and socio-economic condition, age and education of mothers.[54]At the same time, preconception and postpartum care in Georgia is largely non-existent and gynaecologic routine health care visits (outside pregnancy) are rare. Unlike antenatal care, postnatal care services are not part of state funded programme benefits, despite the national antenatal care protocol requirement of a postnatal care consultation within 3 days after discharge from a maternity care facility. According to RHS2010, only 23% of women received postnatal care and only 31% of women who received postnatal care, made a post-partum visit within one week after birth, as recommended by WHO.[55]

Although the coverage of institutional deliveries increased from 92% in 1999 to 99% in 2010,[56] more than 50% of obstetric care facilities have less than 500 births per year.[57] There are still no adequate mechanisms for timely detection of high-risk pregnant women and newborns, proper referral to the appropriate levels of care or information sharing and feedback between the different levels of care (PHC, women's consultation centre, maternity hospital, referral maternity hospital). Often, maternity hospitals, particularly in rural areas, which lack capacity to deal with obstetric and neonatal emergencies (shortage of personnel, medicines, equipment, blood bank etc.) either do not perform referral to the higher level facility, or perform it with substantial delays.[58] A well-organized and centrally coordinated transportation system is an essential part of the effective referral system, but it is not sufficiently developed in the country largely because the transportation services have been massively privatized by the private sector.

Since 2006, in order to improve obstetric and neonatal heath care services, the WHO recommended Effective Perinatal Care principles have been implemented in almost 80% of maternity hospitals in the country with donor support (JSI/USAID). This cost-effective approach involved promotion of

[52] The Georgian Healthcare System State Concept 2014 – 2020 "Universal Healthcare and Quality Management for Protection of Patients Rights", pg.8, Government of Georgia Ordinance No 724, December 26, 2014.

[53] RHSG2010

[54] WHO, Social Determinants of Health, 2007.

[55] RHSG2010

[56] RHSG1999, 2010

[57] Perinatal Care Facility Assessment in Georgia, Report, USAID Sustain, 2013

[58] GERAMOS2014

modern, evidence-based obstetric and neonatal practices to reduce maternal and newborn mortality and improve childbirth outcome for both women and babies.

An important step forward toward strengthening maternal and newborn health care system in the country was the initiation of the Perinatal Care Regionalization project, implemented by the MoLHSA with the support of donor organizations. Regionalization of perinatal care considers defining the levels of care, roles and responsibilities for all levels of care to ensure effective operation of referrals. A pilot project was launched in Imereti and Racha-Lechkhumi maternity hospitals in 2015 with the support of the US Government (USAID/SUSTAIN). Later the project was expanded to Kvemo Kartli and Tbilisi in partnership with the UNFPA. From July 2016, regionalization has been rolled out in Adjara, Guria, Samegrelo, Mtskheta-Mtianeti and Shida Kartli regions with the support of UNICEF. The initiative will be introduced in Kakheti and Samtskhe-Javakheti in partnership with the World Vision.

As a follow up and additional boost to the regionalization initiative, WHO perinatal care quality improvement methodology – Near Miss Case Review (NMCR) has been introduced in three pilot maternities in Imereti region with UNFPA support to further contribute to improvement of the quality of Maternal and Newborn Care, which shall be gradually expanded in all regions.

In addition, current reform efforts in the primary health care (PHC) sector in Georgia provide planners, policy-makers and clinicians with an opportunity to review clinical standards of care – taking a more client-centered, rights-based approach to maternal and newborn health – and to promote greater family and community involvement in approaches to safe motherhood and the health of newborns.

Although several successful nutrition initiatives have been supported by the UNICEF to improve micronutrient intake of women, maternal under-nutrition still remains insufficiently recognized as contributor to maternal and newborn morbidity and mortality. Proper nourishment in pregnancy requires a diverse and appropriate diet along the life course. For example, adequate folate before pregnancy reduces neural tube defects in the baby and prevents stillbirth.[59] Iodine deficiency also causes miscarriages and stillbirths[60]. Maternal anaemia, caused by dietary iron inadequacy and other micronutrient deficiencies is an indirect cause of maternal mortality. It is also a cause of foetal growth restriction, thus contributing to low birth weight[61].

Despite the well-known advantages, early and exclusive breastfeeding require active support at all levels of care. Since 1994, the Georgian government has been fully supporting the breastfeeding program in the country. To promote the implementation of the International Code of Marketing of Breast-milk Substitutes, in 1999, through the joint efforts of the MoLHSA and the International Baby-Food Action Network (IBFAN) Georgian group - "Claritas", the law "On Protection and Promotion of Breastfeeding and Regulation of Artificial Feeding" was adopted prohibiting advertisement and promotion in any form of artificial-feeding products, with the exception of complementary food. Yet, there is a clear need in the country of Code monitoring and the implementation of the law.[62]

3. Human recourses

Workforce planning and human resource management are critical elements for sustained progress in maternal and neonatal health. Overall, there is an excessive number of doctors in Georgia (456.3 per 100,000 people in 2013), whereas the country faces continuous shortage of nurses (328.2 per 100,000 people). Both figures significantly differ from the average numbers of doctors and nurses for the

[59] Copp A.J., Stanier P., Greene N.D. Neural Tube Defects: Recent Advances, Unsolved Questions, and Controversies. Lancet Neurology. 2013; 12(8):799-810. Epub. 2013/06/25.

[60] Hetzel B.S., Mano M.T. A Review of Experimental Studies of Iodine Deficiency during Fetal Development. Journal of Nutrition. 1989 Feb; 119(2):145-51. Epub. 1989/02/01.

[61] Khan K.S., Wojdyla D., Say L., Gulmezoglu A.M., Van Look P.F. WHO Analysis of Causes of Maternal Death: a Systematic Review. Lancet. 2006; 367(9516):1066-74. Epub. 2006/04/04.

[62] Nemsadze K. Report from the Country of Georgia: Protecting and Promoting Breastfeeding through Regulation of Artificial-Feeding Marketing Practices. The Journal of Perinatal Education. 2004;13(1):23-28. doi:10.1624/105812404X109366.

European Region.[63] At the same time, there is evidence of uneven distribution of medical personnel across the regions, with the major concentration in the capital city. The same is true with regard to obstetricians and gynecologists (OB/GYN), anesthesiologists, neonatologists and midwives in Georgia.

A high proportion of 833 OB/GYN and 397 neonatologists officially registered in perinatal care facilities in 2015,[64] including midwives (501) and neonatal nurses (608), have been extensively trained in applying evidence-based maternal and neonatal guidelines and protocols over the last decade through donor support (USAID/SUSTAIN, UNICEF, UNFPA) or within the health care networks of private insurance companies. Yet, there are still significant gaps in the availability of qualified medical professionals that could be largely attributable to a lack of mandatory continuing medical education (CME) in the country, which has been widely recognized as a core component of continuous professional development (CPD).[65] CME is essential for the acquisition and retention of knowledge, attitudes, skills, behaviors and clinical outcomes, being as well a fundamental factor in the maintenance of certification.[66] However, in Georgia, in the absence of state recertification requirements, the medical license, once obtained, retains permanent validity. This discourages clinicians from updating their knowledge and skills on a regular basis. Another important issue is a lack of professional or financial incentives for health care providers that results in a high staff turnover, and eventually, their shortage, particularly in rural areas, and, thus, creates unacceptable barriers to access adequate health care. Besides, in certain remote and mountainous areas the number of deliveries varies from two to five per month, which disables accumulation of adequate clinical experience and/or keeping the personnel focused on international evidence.

4. Quality of care

Ensuring quality of care requires specific, evidence-based standards of care and a process to ensure implementation of these standards. However, these standards are either missing or non-operational.

The process of clinical guidelines development is fragmented, without their subsequent updating and monitoring of implementation. Since 2014, overall, 159 national guidelines and protocols have been approved, including 12 for main obstetric and neonatal conditions. However, the use of these evidence-based guidelines and protocols by health care providers in routine practice is quite limited, which greatly affects quality of provided care.

Improvements in health-system performance and ongoing clinical audits could reduce the high rates of adverse maternal and neonatal outcomes in a country such as Georgia having a high level of health-care coverage. But promoting quality care in the private sector in light of the relatively week reinforcement mechanisms appeared to be a serious challenge for MoLHSA. Although, medical care quality improvement and patient safety mechanisms elaboration are the part of the license requirements, medical facilities' management have neither financial nor other type of incentive to care on constant surveillance and improvement of medical service quality. There are no internal or external clinical audit-quality assurance mechanisms in place. Regulatory approaches such as accreditation, certification, and licensing are required to ensure that both facilities and practitioners meet nationally defined standards.

The MoLHSA has established a Maternal and Child Health Council comprised of leading experts to address the major challenges in the field with particular focus on maternal and neonatal mortality. However, the response activities need further strengthening. In 2013, in order to address the high rate of caesarian section (35-38%) in the country, the MCH Council facilitated the development of a

[63] The Georgian Healthcare System State Concept 2014 – 2020 "Universal Healthcare and Quality Management for Protection of Patients Rights", GoG Ordinance No 724, 26 December 2014.

[64] National Centre for Disease Control and Public Health. Health; Statistical Yearbook 2015 Georgia. Ministry of Labour, Health and Social Affairs, Tbilisi 2016.

[65] du Boulay C. From CME to CPD: getting better at getting better? BMJ. 2000;320:393–4.http://dx.doi.org/10.1136/bmj.320.7232.393.

[66] Academy of Medical Royal Colleges. The Academy's Role in Revalidation.http://www.aomrc.org.uk/revalidation/the-academys-role-in-revalidation.html. Accessed August 1, 2016.

clinical guideline and protocol for caesarian section strictly defining the indications for this intervention. However, the rate of surgical delivery, especially primary caesarean sections, remains persistently high in Georgia exceeding by far the WHO recommended rate of 15%. There is a clear need for a proper clinical audit system to better understand the precise forces sustaining these trends in their broader context, and to develop appropriate policies and guidelines for performing and monitoring cesarean deliveries in Georgia as well as interventions that might encourage an increase in vaginal births.

5. Health Information System

To track progress toward global, national, and local goals and targets, there is a need to strengthen availability and quality of data on maternal and newborn mortality and health to inform decision-making and promote accountability. The Commission on Information and Accountability for Women's and Children's Health has highlighted the need for improving data to more effectively track results at national and global levels through active engagement of global partners, national governments, communities, and civil society to allow for targeted monitoring, accountability, and action.

A recent global assessment of 148 national civil registration and vital statistics systems (CVRS) for the period of 1980–2012, using a composite, vital statistics performance index, has classified Georgia in the Medium Group of countries, who have operational systems with capacity to reach completeness and coverage of the cause-of-death data, but suffer from residual problems with data quality.[67] Despite these limitations, the research documented the progress made by the Georgian government toward strengthening its CRVS system with a special focus on death registration coverage that was achieved through introduction of several institutional and legislative reforms since 2009 (such as mandatory notification of death within five days, electronic medical death certificates, etc.). This was confirmed by the GERAMOS 2014, which, in contrast to the first RAMOS (GERAMOS 2008)[68] looking at 2006 data did not reveal any unregistered death of women of reproductive age in 2012. However, similar to the GERAMOS 2008, this study identified 9 unreported maternal deaths out of a total 23 deaths due to maternal causes. The majority of these deaths were attributable to indirect causes or deaths that occurred after 42 days of the termination of pregnancy, which in official sources were misclassified to other causes.

There are several validated methods for improving maternal mortality statistics such as adding a pregnancy checkbox to the medical death certificate and a linkage of the women's medical records with the birth records. The latter has been successfully used by the National Statistics office since 2008, based on the first RAMOS recommendations, to identify mothers, who died within one year postpartum. Thus, deaths to undelivered women are more likely to be underestimated.

The deaths registration completeness and accuracy of ascertainment of causes of death are important prerequisites for the data usability to inform policy decisions. In this view, the high proportion of ill-defined causes of death (IDCD), with the highest share of 50% being reported in 2010, still remains a major concern. According to RAMOS 2014, 21.7% (5/23) of all maternal deaths fell in this nonspecific category. In order to address this issue a special program of registration of the deaths cases under the MoLHSA was initiated, draft order was prepared; secondary investigation of the IDCD cases using verbal autopsies was carried out engaging regional public health centers; software for technical validation and control was developed by the USAID Health System Strengthening Project and the MoLHSA, etc. As a result, in 2014, the share of IDCD declined to 29%[69]. However, further strengthening of human resources and monitoring capacities of the civil registration and vital statistics systems (CRVS) is needed.

In 2013, the MoLHSA implemented the maternal, under-5 deaths and stillbirths' urgent notification system. Every case must be notified within 24 hours for further investigation and research. According

[67] Mikkelsen L., Phillips D E, Abouzahr C. et al. (2015) A global assessment of civil registration and vital statistics systems: monitoring data quality and progress. The Lancet D-14-00220 S0140-6736(15)60171

[68] GERAMOS2008

[69] http://www.ncdc.ge/AttachedFiles/Yearbook-_ENG_2014%282%29_23e48d63-3434-4ee2-a76c-f7653011ae02.pdf

to the MoLHSA Order (07.03.2016 No01-11/n), healthcare providers are obliged to call the hot-line of the Emergency Coordination and Response Department of the MoLHSA and notify about the death event. The information must be reported to the Health Department of the MoLHSA electronically on the daily basis. In 5 days facilities are obliged to submit copies of medical charts to the Health Department of MoLHSA.

One of the responsibilities of the National Center for Disease Control and Public Health of Georgia (NCDC&PH) is maternal and child health surveillance. The Department of Medical Statistics of the NCDC&PH collects data on maternal and child health from all healthcare facilities on monthly and annual bases since 1996. Data on antenatal, intra-natal and postnatal care, as well as maternal deaths, early neonatal deaths and stillbirths are reported to NCDC&PH by perinatal care facilities on a monthly basis.

In 2012, NCDC&PH implemented an active surveillance of death of reproductive age women (15-49y). Since 2015 the system also covers under -5 child mortality. The notifications are recorded by local public health offices that are responsible to collect information from local health facilities through Electronic Integrated Disease Surveillance System (EIDSS).

In January 2016, MoLHSA and NCDC&PH launched an electronic registry "Mother's and neonate's health surveillance system", so called "Georgian Birth Registry" (GBR) supported by UNICEF. The system contains information on all cases of pregnancy-, delivery-, postpartum-, abortion, including maternal deaths, stillbirths and early neonatal deaths. Yet, a functioning and user-friendly health information system to assist in data collection, as well as communication and coordination between levels of care, and between providers and patients still needs further development.

2.3. Objectives and priority interventions to improve the Maternal and Newborn Health in Georgia

Objective 1: By 2030 women will have full access to and will utilize evidence-based preconception, antenatal, obstetric, neonatal, and post-partum care that meet their needs

Rationale

Access to affordable, high quality respectful maternal and newborn health care is fundamental to the survival of pregnant and childbearing women and newborns. It includes access to services, goods, and information and the removal of inequities due to age or marital status or to social, cultural, ethnic, geographic, economic, legal, and political barriers. Long distances, financial constraints, poor communication and transport, weak referral links, and at times, low-quality care in health facilities, can also limit access to care for those who need it most. Women who live in rural areas are less likely to use MNH services than those in urban areas. Poverty continues to be the major barrier to accessing life-saving services. Women in the lower wealth quintiles make fewer ANC visits and utilize health services less often or with much longer delays than do those in the top quintiles.[70] By striving to improve equity of access and use of health services by women and girls – particularly the most vulnerable – through addressing the key drivers of inequity, women and girls will benefit from increased access to quality services and information alongside the removal of barriers that put pregnant women and their newborns at risk.

Priority interventions:

a. Create an enabling environment for the promotion and support of maternal and newborn health programs

A sustainable program is only possible if there is commitment at all a level for improving the healthcare environment for MNH. The complexity of MNH makes it clear that no single ministry,

[70] RHSG2010

agency or sector has all the requisite resources, skills and even authority to prosecute all the interventions to achieve desired results. A multi-sector approach working through collaborative and sustainable partnerships within and beyond the health sector, including public-private partnership, is therefore shall consequently be pursued and strengthened to complement the Government's efforts towards improving MNH. Advocacy among parliamentarians, national and local authorities and civil society can strengthen crucial political will to prioritize equity and expand policies and programs on MNH. The MoLHSA through its MCH Council will play an important role in identifying the necessary partners and determining their potential roles through bilateral discussions, advocating for increased commitment and budgetary allotment to MNH at all levels, as well as developing an accountability framework to ensure that other sectors perform their health-related functions to support and promote MNH program. For this to happen, there is a need of a free flow of data and information, and results from annual health sector reviews should be made publicly available.

All women and young people shall have access to quality MNH services that are safe, guard their right to privacy, ensure confidentiality, and provide respect and informed consent, while also respecting their cultural values and religious beliefs, thus assuring that the true health interests of the clients (mothers, babies and families) are met. The MNH strategy aims to further improve the legal framework governing the protection and rights of mothers and newborns to ensure provision of accessible, acceptable, affordable and comprehensive MNH services, as well as information in the hands of citizens to know their rights and the means to act on them.

b. Reduce geographic, financial, and social-cultural barriers to maternal and neonatal services

The gap between those with highest and lowest coverage of effective interventions can be closed through universal health coverage for MNH care, which encompasses two equally important dimensions: reaching all people in the population with essential services, and protecting them from financial hardship due to the cost of these services. The introduction of the universal Basic Benefit Package coupled with the increase in public expenditure for health undoubtedly addressed the low utilization of health services. However, with a view to reducing and even eliminating the financial, cultural, and structural barriers that impede access to the health services, primarily by the neediest population groups, a systematic analysis of these barriers will be essential to inform inter-sectoral and interagency actions and strategies to prioritize adequate and sustainable resources for MNH. Financial initiatives, culturally sensitive programs, and other effective efforts, in poor rural communities, are core interventions that require further investment and expansion. Evidence shows that national or social insurance programs, user fee exemptions, conditional cash transfers, and vouchers, have resulted in increased use of maternity services in a relatively short time frame and on a relatively large scale[71].

Improving access to preventive care makes it important that a minimum home-based package of MNH care in the context of PHC be available in the rural and remote communities to provide family planning and other commodities, handle emergencies promptly and make referrals. PHC providers, if trained adequately, can assist families in strengthening caregiving and nutrition practices and facilitate birth preparedness, identification of danger signs and appropriate care seeking though designated home visits during pregnancy and after childbirth. This will require provision of training, equipment and supplies, as well as travel and transport allowance or other incentives to keep PHC workers motivated. Home based MNH interventions have shown significant reductions in preventable morbidity and mortality.[72]

By harnessing the increasing presence of mobile phones among diverse populations, there is promising evidence to suggest that Mobile Health (mHealth) can be used to deliver increased and enhanced health care services to individuals and communities, while helping to strengthen health

[71] Morgan L., Stanton M., Higgs E.S., Balster R.L., Bellows B.W., Brandes N. et al. Financial Incentives and Maternal Health: Where Do We Go from Here? Journal of Health, Population and Nutrition. 2014; 31 (4, supple 2) 8-22.

[72] UNICEF. What Works for Children in South Asia. NEWBORN CARE: AN OVERVIEW. 2004. https://www.unicef.org/rosa/Newborn.pdf

systems using one-way, two-way, or multi-way communications.[73] Most commonly identified one-way or "push" design involves use of bulk short message service (SMS) for large audiences, particularly in underserved and hard-to-reach rural locations, to deliver information tailored to personal needs, including appointment reminders to encourage follow-up visits (e.g. for antenatal or postnatal care, etc.).

As part of the life- saving activities to be implemented at the onset of every humanitarian crisis the Reproductive Health Minimum Initial Service Package (MISP) will be integrated into the MoLHSA Sectoral Preparedness and Response Plan to Disaster and Emergency Situations.

c. Strengthen community mobilization and participation to increase demand for and access to MNH services within the community.

Evidence shows that the implementation of community mobilization and participation is beneficial to improve maternal and newborn health, in particular in rural settings.[74] This approach seeks to empower communities to take greater responsibilities for their health and well-being. Interventions include community-based identification of problems, understanding root causes (such as barriers to use of care), mobilizing necessary resources, demanding rights to health and quality services, and promoting supportive community norms. Within the remit of community engagement, influential community and religious leaders, civil society organizations and local decision-makers can contribute significantly to social mobilization and community supports to strengthen connections between households and health system. Such mobilization can create demand for services, reduce the barriers to access and ensure that women and newborns stay in care to obtain the full benefit of services. These efforts have met with success in improving use of facilities, referral for complications, reduction of maternal morbidities, and reductions in stillbirths and perinatal mortality[75].

Objective 2: By 2030 quality of maternal and neonatal health services will be improved and standardized along with full integration of these services

Rationale

The health of mothers, newborn babies, and children consists of sequential stages and transitions throughout the lifecycle. Women need services to help them plan and space their pregnancies and to avoid or treat ill-health conditions. Pregnant women need antenatal care that is linked to safe childbirth care provided by skilled attendants. Both mothers and babies need postnatal care during the crucial 6 weeks after birth; postnatal care should also link the mother to family-planning services and the baby to child health care.

Saving lives depends on high coverage and quality of integrated service-delivery packages throughout the continuum, with functional linkages between levels of care in the health system and between service-delivery packages, so that the care provided at each time and place contributes to the effectiveness of all the linked packages. It can be defined along the dimension of time (throughout the life-course), and the dimension of place or level of care. The continuum of care over time includes care before pregnancy (including family planning services, education, and empowerment for adolescent girls), during pregnancy, childbirth and postpartum. On the other hand the continuum of care along the dimension of place or level includes the home, the first-level facility, and the hospital. Lack of integration between such programs can result in fragmented service delivery that affects quality and continuity of care, and cause dissatisfaction for both clients and providers. However, the challenges are apparent in the Georgian health care system, where such linkages are inadequate and

[73] Källander K, Tibenderana JK, Akpogheneta OJ, et al. Mobile Health (mHealth) Approaches and Lessons for Increased Performance and Retention of Community Health Workers in Low- and Middle-Income Countries: A Review. Eysenbach G, ed. Journal of Medical Internet Research. 2013;15(1):e17. doi:10.2196/jmir.2130.

[74] USAID. Ending Preventable Maternal Mortality: USAID Maternal Health Vision for Action Evidence for Strategic Approaches. 2015. https://www.usaid.gov/sites/default/files/documents/1864/MH%20Strategy_web_red.pdf

[75] Prost A., Colbourn T., Seward N., Azad K., Coomarasamy A., Copas A., et al. Women's Groups Practicing Participatory Learning and Action to Improve Maternal and Newborn Health in Low-resource Settings: a Systematic Review and Meta-analysis. Lancet. 2013; 381(9879):1736-46. Epub. 2013/05/21.

the consensus has not been reached on a minimum package of preconception and postnatal interventions.

Priority interventions:

a. **Strengthen the continuum of care for MNH through enhancing preconception, antenatal, intrapartum and postpartum/postnatal care connected with effective referral system to improve pregnancy outcomes**

The key to success in improving quality service delivery along continuum of care is introducing high-impact, cost-effective interventions, including integration of preconception (pre-pregnancy) and postpartum care packages in the PHC basic benefit package; introduction of the stratified model of expanded antenatal care by identification of different levels of patronage of pregnancy to institute measures for early identification, treatment and timely referral of high risk pregnant women, including elimination of mother-to-child transmission of HIV and syphilis; improving obstetric and neonatal and the referral system through regionalization of perinatal health services countrywide, strengthening of emergency transportation system for high-risk mothers and sick babies, as well as the introduction of electronic medical records (EMR) system for improving functional and informational links between different levels of MNH care.

A significant component of maternal and newborn health and survival is promotion of healthy nutrition before and during pregnancy and improving the effectiveness of iron–folic acid and other micronutrients supplementation programs through strengthening supply chain systems and ensuring adherence to established protocols. At the same time, support for early initiation and exclusive breastfeeding and use of expressed breast milk is critical for well-being and survival of the newborns. To this end, effective interventions should address barriers in the scaling up of exclusive breastfeeding and promote the baby friendly hospital initiative (BFHI).

b. **Foster quality of MNH care through process improvement efforts and also through advocacy, legal, and accountability mechanisms with both private and public sector providers.**

Despite significant increases in the number of MNH facilities over the past decade, the quality of care in many is not uniform. In collaboration with professional associations and other stakeholders, government should regularly update national policies, guidelines, norms and standards for interventions around the continuum of maternal and newborn care in line with globally agreed evidence-based guidelines and locally defined strategies, and enforce their implementation. Standardized minimum quality indicators shall be defined on national level in order to track quality of essential interventions including for management of life-threatening maternal and newborn complications. Regular maternal and perinatal/neonatal death/near miss audits, with discussions between the staff caring for the mother and baby, are useful in determining avoidable causes, challenges and finding possible solutions. Auditing maternal and perinatal deaths and near miss cases and linking the results to action has the potential to strengthen capacity to avoid preventable causes of mortality. Hence, ideally they should be carried out at least in hospitals. A fundamental principle of all these audits is the importance of a confidential, secure environment in which only anonymized cases are assessed, thus resulting in a more complete picture of events leading to adverse maternal outcomes to draw relevant recommendations for continuous improvement of quality of care. In this regard certain amendments in legislation enabling conducting confidential audit of maternal death cases will be considered, in addition to moving from old "personal" approach of blaming culture" to new "systems approach" that will include decriminalization of mortality cases, to create a safer health-care culture and improve quality of care.[76]

c. **Build the competency of health providers, and promote policies, budgets, and regulations to address the needed skill level mix, appropriate health worker deployment, retention, and motivational efforts, including task shifting**

[76] Reason, James (1995). "A System Approach to Organizational Error". Ergonomics. 38: 1708–1721. doi:10.1080/00140139508925221

High impact interventions can be implemented by ensuring that facilities are adequately staffed and that clinical personnel are qualified and have competency in properly assessing patients and key life-saving skills to provide high quality services. Therefore, determining gaps in human resources density and promotion of policies, budgets, and regulations to address the needed skill level mix, appropriate health worker deployment, retention, and motivational efforts to reflect the importance of the various components of maternal and newborn care then become essential. Improving the competency of health workers envisages review and update of pre-service and in-service training to incorporate the latest accepted guidelines for national MNH programs. A system for mandatory continuing medical education and recertification for health workers is also extremely important for addressing the human recourse problems. The CME courses should be based on unified evidence-based education plan and innovative learning methods to ensure that healthcare providers, who are licensed, certified or registered by the standard setting bodies are being trained and examined to a sufficient standard to provide high quality, up-to-date and patient-centered care.

d. Introduce innovative mechanisms for MNH care financing

Motivation of MNH service providers is important for determining the quality of care, and the government may consider incentives, such as financial payments, bonuses and public recognition. A particular form of incentive are performance-based financing and selective contracting which are being introduced in several countries as the potential to improve quality of services.

e. Strengthen Health Management Information System and research capacity to improve quality of data for evidence-based informed and inform decision-making and resource allocation for MNH

Georgia and development partners need to invest more in measurement and the collection of routine data on outcomes, coverage and quality of care. In addition to standardized data sources, indicators, and intervals for data collection to allow for better global comparisons, the local use of data for ensuring quality of care in health services is an important component of program effectiveness. Quality and completeness of data need to be monitored continuously and the data should be disseminated as the basis for planning. GBR, a national health registry of all births in the country, introduced in January 2016, will further improve MNH health management information system in general, and will clarify the causes and consequences of pregnancy and birth related health problems.

Maternal and perinatal deaths surveillance and response shall be an integral part of MNH strategy as an effective means to identify deaths, investigate their determinants and take remedial action on preventable causes of death. Accurate documentation of the cause of death through registration or special review/surveillance mechanisms is a foundation for improving quality of measurement.

New opportunities as well as challenges for health systems and the critical need to invest more wisely in demand targeted research (population-based household surveys, operational research) and analyses, and country-led processes based on evidence to guide decision-making among policy-makers, programmers, and clinicians, toward more effective scaled-up efforts to reach every pregnant woman and newborn.

Objective 3: By 2030 awareness and knowledge in the general population about the medical standards of high quality care and the rights of patients who use this will be substantially improved.

Rationale

Saving mother and newborn lives and ending preventable deaths require interventions to reduce delays in and between recognition of the problem, decision-making and selection of the appropriate facility, and coordination to move women and baby from home and between facilities, and once at the facility, timely and appropriate response with quality emergency care.

Priority interventions:

a. Support the IEC/BCC activities to raise awareness in the general population about the

maternal and household healthy behaviors and MNH programs

Prospects for a healthy outcome for both mother and baby improve when all women and families, including adolescent girls, have adequate knowledge of how to seek care at the right time and the right place, and are supported by their male partners and their communities to engage in healthy behaviors. The behaviors include choosing whether and when to become pregnant and entering pregnancy as free from infections as possible and with good nutritional status, as well as maintaining healthy diets and practices during pregnancy, birth, and postpartum. Increased awareness of prevention, knowledge of warning signs, and rapid access to emergency obstetric care services is a proven strategy to improve MNH. Health communication and other behavior change interventions to improve knowledge of maternal and newborn care and family planning are essential to improving household behaviors and care seeking for potentially life-threatening complications. Supporting male engagement for improved reproductive health and maternal and infant health outcomes will further contribute to achieving the objective. Culturally appropriate information and messages can be shared through a variety of channels such as mass media, social media, interpersonal counseling, mobile and other innovative technologies.

b. Strengthen advocacy and social mobilization activities to promote maternal and household healthy behaviors and MNH programs

Advocacy efforts and social mobilization are additional beneficial elements helping to modify hindering traditional beliefs and cultural practices and increase demand for good-quality care. Advocacy is essential for increasing awareness and motivation among all categories of stakeholders to mobilize resources and services, and to accelerate the implementation of BCC programs. Social mobilization communication includes the process of capacity building and inter-sectoral collaboration, from national to community levels, involving civil society, NGOs, community- based organizations, religious groups, media and the private sector to support BCC activities. Public-private partnerships are especially amenable to multi-media advocacy campaigns by using existing private sector communications platforms, television, radio, social media, and m-health technologies.

The Table below presents the ***impact indicators*** that the strategic interventions listed above for Maternal and Newborn Health are expected to affect, and the targets that are expected to reached as a result. These indicators should be used for impact evaluation during the period of implementation.

Objective and related impact indicators	Baseline 2016*	Target 2030
Maternal and Newborn Health		
Maternal Mortality Ratio (/100,000 LB) (SDG 3.1.1)	36.0	12.0
Neonatal Mortality Rate (/1000 LB) (SDG 3.2.2)	6.2	5.0
Stillbirth Rate (/1000 B)	9.7	6.8
Women will have full access to and will utilize evidence-based preconception, antenatal, obstetric and neonatal, and post-partum care that meet their needs		
% Women who received preconception care	10%	100%
% Women aged 15-49 who received 4 or more antenatal care visits	86%	100%
% Women who had postpartum contact with a health provider within 6 weeks of delivery	10%	100%

% Newborns who had postnatal contact with a health provider within ?? days	80%	100%
Quality of maternal and neonatal health services will be improved and standardized along with full integration of these services		
Perinatal Mortality Rate (/1000 B)	13.4	8.0
Early Neonatal Mortality Rate: 0-6 (/1000 LB)	3.7	3.0
Late Neonatal Mortality Rate: 7-28 (/1000 LB)	2.5	1.7
% Live (hospital) births with low birth weight (<2,500 grams)	6%	5%
% Caesarean section deliveries	41%	15%
*Awareness and knowledge in the general population about the medical standards of high quality care and the rights of patients who use this will be substantially improved***.**		
% of WRA who can identify at least three maternal danger signs	20%	>90%
% of WRA who can identify at least three danger signs of newborn	20%	>90%

* Latest available data in 2016

3. FAMILY PLANNING

Family planning (FP) is a key issue for improving mother and child health. Through universal access to FP services the couples are able to prevent unintended pregnancy and induced abortion, high-risk pregnancy at too young or too old ages, and it enables them to properly plan pregnancy and space child bearing for better health outcomes for the mother and newborn. Unintended pregnancy and subsequent childbearing are well-known risk factors for maternal health, and they are also, in various ways, associated with health and development risks of children born. Proper child spacing reduces maternal and infant morbidity and mortality. Induced abortion, is not the preferred method to prevent unwanted births, among other reasons because it implies health risks for the woman and for her future fertility. Healthy reproductive behaviour ensures a positive impact on future generations. Efficient family planning reduces the number of unwanted pregnancies and unsafe abortions, prevents pregnancy-induced mortality and morbidity, reduces the incidence of sexually transmitted infections, including the HIV, protects the teenagers' health and it is one of the most efficient means of improving the health and well-being of women, men, young people and the entire community. For all these reasons, investing in modern FP is one of the most effective strategies for improving maternal, infant and child health.

3.1. Development and current status of family planning in Georgia

Despite national laws designed to uphold people's reproductive rights and the right of access to reproductive health care, along with significant amounts of resources and technical efforts invested in the sector, access to and use of family planning services remains quite limited in Georgia. Provision FP counselling and services are still limited at the Primary Health Care (PHC) level. The laws upholding the reproductive rights of Georgian citizens do not go on to link these rights directly to the right of access to quality FP services and information.

Although the Georgia Reproductive Health Surveys between 1999 and 2010 have indicated some progress, access to FP services remains a source of serious concern, because it is still characterised by high levels of unintended pregnancy, a substantial unmet need for modern effective FP method use, and a still high incidence of induced abortion. The latter is still used as a main method of FP, and its incidence can only be reduced by increasing access to modern, effective FP methods. Because recent representative data since the Reproductive Health Survey 2010 (RHS 2010; Final Report 2012) are virtually absent, it is hardly possible to assess the latest developments in FP or its current status as of 2016.

It is also worth noting that recent recovery of fertility[77] in Georgia has taken place in the context of increasing prevalence of contraception. Namely, the diffusion of contraception fostered a strong decline of abortion and enabled an increase of fertility at the same time. According to the data of the surveys on reproductive health in Georgia, it is envisaged that contraceptive prevalence may be further increased by 15-20 percentage points without endangering the recovery of fertility but with a continuing decline of abortion rates. Furthermore, decline in induced abortion rate will have positive impact on overall fertility, as will contribute to reduction of secondary infertility, which is associated with high abortion rate, STIs and related pelvic infections (37% of women aged 35-44 are not using the contraceptive method because of female infecundity[78]). The real trade-off that the country faces in this area is not so much one of fertility vs. family planning, but of **family planning vs. abortion**.

1. Unintended pregnancy

According to RHS 2010, only 41% of all pregnancies in Georgia were intended in 1999. This percentage increased via 48% in 2005 to 63% by 2010. In this last year 26% was unwanted and 11% mistimed (wanted later). Most unintended pregnancies occurred in elderly women: 39% of all pregnancies among women aged 30-34 were unintended and 54% among women aged 35-44 years.

[77] According to the most recent 2014 Census, the TFR in Georgia is 2.2

[78] Georgia Population Situation Analysis, 2014, UNFPA, p. 68-69.

The vast majority of unwanted pregnancies did not result in a live birth (94.4% ended in induced or spontaneous abortion or in stillbirth). This means that effective FP does not lower the birth rate, but it does decrease the number of abortions.

2. Use of modern methods of contraception

Although overall contraceptive use increased since 1999 from 41% to 54% in 2010, Georgia still has almost the lowest level of use of the countries in Eastern Europe.[79] Use of traditional methods (rhythm and withdrawal) remained almost unchanged in Georgia, with still about one third of all users applying those unreliable methods, or 18.5% of all married couples. This is high in comparison to the European average (13.9%), and particularly in comparison to Western Europe (3.2%). Of all married women in Georgia in 2010 only 35% used a modern FP method, mostly being condoms or an IUD. Use of oral contraception (4%) was still remarkably low compared to Europe as a whole (21.4%).

3. Knowledge of contraception

Knowledge of reproductive age women about modern contraception was still low in 2010 and it was not obtained from credible sources. Condoms and the IUD were quite well known, but 19% did not know about oral contraception and 50% did not know how to use the method. Only 39% of women knew about female sterilisation, and male sterilisation was almost completely unknown (4% knew it). For only 17% of women a doctor was the most important source of information. This may have been an important reason for the poor knowledge on advantages and disadvantages of different methods.

4. Unmet need for contraception

In 2010, according to RHS 2010, 12.3% of all married couples did not use any FP method, although they were at risk of unwanted pregnancy. In addition to this, 18.2% of married women at risk used an unreliable method. Together, this represents an unmet need for *modern* contraception **of 30.5%,** which is very high for European standards. Unmet need is particularly high in rural areas, where it can reach 40%.

5. Induced abortion

Abortion is still widely used method of fertility regulation in Georgia. Before 2000, Georgia had the highest documented Total Induced Abortion Rate in the world - 3.7! Since then, survey data indicate that this rate has decreased. According the RHS 2010, the TIAR, that is approximately the mean number of abortions during a woman's lifetime, was still 1.6. The latest *reported annual* abortion rate in Georgia (56 abortions per 1,000 women 15-44 years) was still more than double the rate in southern Europe (26) and three times the rate in north-western Europe (18)[80]. But the *reported* abortion rate in Georgia should be handled with caution, because it is very likely that several *induced* abortions have been reported as "spontaneous" or as "stillbirth", because the latter rates are about twice as high as international averages. In conclusion, the Georgian abortion rate is still high or very high clearly indicating the low access to and utilization of Family Planning services.

6. Family Planning service delivery

Reduction of the incidence of induced abortion is among the most relevant priorities of the national health care system with regard to fertility and reproductive health. Much has been accomplished during past decade through introducing and increasing access to free of charge modern methods of family planning; UNFPA and USAID (through JSI) have trained PHC doctors to provide FP services and supplied free of charge modern methods to the health system. This was followed by inclusion of FP service provision into the competencies of the PHC providers – Family Physicians and nurses. However, due to a lack of reinforcement mechanisms and of (financial) incentives for PHC doctors, family planning counselling is not until now fully integrated at PHC level, and is still highly concentrated in obstetrics and gynecology specialty who traditionally are not focused on promotion of modern contraceptive methods. In overall, substantive piece of work need to be accomplished to

[79] World Contraceptive use 2011. UN Department of Economic and Social Affairs; Population Division. (Wallchart).

[80] Gilda Sedgh, Jonathan Bearak, Susheela Singh et al. Abortion incidence between 1990 & 2014: global, regional, and subregional levels and trends. The Lancet, Published on May 11, 2016 (http://dx.doi.org/10.1016/S0140-6736(16)3038-4).

implement recommendations made in the Programme of Action that resulted from the International Conference on Population and Development (ICPD 1994) and the SDG Global Target 3.7 to make FP universally available, including through the PHC system.

7. Allocation of Financial Resources

There are currently no state funds budgeted for family planning counseling or service delivery. Neither these services are included in the benefit package of state or private insurance mechanisms. Contraceptives are also not included in the Georgia's essential drug list.

8. Contraceptive Security

UNFPA & USAID have been the only providers of free modern contraception to those most in need of it, but this had to be discontinued in 2015. There are currently no contraceptives being supplied through public sector health programs. They are available in private markets and due to the recent regulatory changes fall under the prescription practices (*whereas, means for "emergency contraception" has been waived from prescription*); oral pills are sold at a relatively high price, thus are not affordable for many women in need, in particular in rural areas.

The RHS 2010 report concluded that "satisfying the unmet need for contraception in Georgia will require a substantial increase in programmatic and financial support" and continued saying "The national reproductive health strategy should provide free or low-cost contraceptive supplies, educate women about what methods and services are available, and disseminate accurate information to counter incorrect beliefs about modern contraception" (p. 173).Although there is an obvious need of a new evidence (*fourth round of RHS or a comparable survey)*, these recommendations are still as valid in 2017 as they were in 2010; and efforts have to be intensified to make progress in attaining the **SDG Global Target 3.7** calling for achieving by 2030, universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

The Objectives of this Strategy will only be met if the access for the entire population to affordable, quality reproductive health/family planning services, and to the information necessary for them to adopt healthy preventive behaviours related to their sexual and reproductive health is ensured. Government is committed to putting in place the foundational support systems required for the population to have access to quality RH/FP services at each level of the health system. Approaching the RH/FP health needs of the population in such a holistic, integrated manner, using evidence-based clinical and public health practices, would enable both public and private sector providers to meet these needs much more effectively.

3.2. Objectives and priority interventions to improve the Family Planning situation in Georgia

Objective 1: By 2030 Family Planning services will be universally accessible for all who need them

Strategic Priority 1: Strengthen stewardship role of the Government of Georgia in Family Planning to effectively lead, manage, and coordinate the FP services, and ensure their integration with RH/MCH services at various opportunities (ANC/PNC/Institutional delivery, HIV counseling, etc.)

Rationale

Until now FP education and service delivery has suffered from a lack of national stewardship. As yet, there is no comprehensive and systematic approach for organising FP information, education and service delivery; and policy and provision of services related to the various components of family planning are kept conceptually and practically separate in medical education, organization of services and health communications. All international experts and technical organisations, based on global and regional evidences strongly recommend that FP should be firmly embedded in Primary Health Care

(PHC), which is therefore also a core objective of this strategy. There is an International consensus that the vast majority of contraceptive methods can be safely distributed or prescribed at the PHC level, and that only a few methods require more than an oral anamnesis (*for checking some very rare medical contra-indications*) and measuring blood-pressure[81]. Because most FP activities do not require specialist knowledge and skills, integrating it in PHC will prevent waste of (expensive) specialist training and involvement, and will be rather cost-beneficial.

In pursuit of this objective the MoLHSA will execute following priority interventions:

- Family Planning will be given the deserved priority in the broader context of health-sector reform, including initiatives targeted at strengthening PHC system; and ensure that such services meet health needs over the life cycle, and ensure equity of access to information and services.
- The State will include FP counselling and prescription of contraceptive supplies (*including the IUD and hormonal contraception*) in the Basic Benefit Package (BBP) of the Georgia Universal Healthcare Programme, on condition of the PHC coordination responsibility (*in case of referral and prescription of medication*), and ensure relevant resource allocation within state budget. In addition, the State will introduce performance-based financing for improving quality of service delivery.
- The existing MCH Council at MoLHSA will be strengthened to be better equipped with technical capacity for evidence-based policy/strategy formulation, and to act as a steward of family planning in Georgia; the Council will lead/spearhead elaboration of policies and standards, adaptation of guidelines, coordinate actions with other MoLHSA departments/affiliates, as well as with healthcare providers; and advocate and mobilize donor resources. Also, will insure inter sectoral approach towards FP strategy implementation.
- Additionally, MCH Council, on a needed basis, will ensure revision of the current legislation in order to establish enabling legal base for effective implementation of this Strategy and consequent Three Year Action Plan, based on the principles of human rights, gender equality and lifelong approaches.

Strategic Priority 2: Ensure re-orientation of FP service delivery

Rationale

Availability of the integrated packages of FP services at primary, secondary and tertiary levels is dependent on the range of systems required to ensure that skilled providers, supplies and equipment, adequate financial resources and an informed client population are in place. In addition, managers of the health system must have access to the information – on epidemiology, health service delivery and uptake, and health outcomes – required for planning, oversight and evaluation of health services.

Considering lessons learned in other countries, State will design most effective service delivery modality that insures easy access to couples through provision of the selected FP methods at the PHC level, without compromising safety or quality of care; as well as integrating FP into the relevant MCH services at the higher levels of the service delivery system.

The main characteristics of the system encompass following:

1) PHC is exclusively in charge of coordinating FP services of all FP clients (including post-delivery and post-abortion FP care), i.e. referral to a specialist in case of a need for specialist care, and referral back after it. PHC will be responsible for keeping the FP history of all patients enrolled in its unit.
2) Criteria for referring FP clients from PHC to specialists are defined and included in new protocols/SOPs for FP service delivery at the PHC level.

[81] See Family planning: a global handbook for providers; 2011 Update. Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs and World Health Organization. 2011. Chapter 24, and Annex 1.

3) FP service delivery is fully based on International (*particularly WHO*) evidence-based and consensus best-practice protocols and guidelines.

PHC and MCH service providers will have the knowledge, skills and resources to provide quality reproductive health services,[82] as measured by staffing levels; evidence of provider skills and adherence to standard quality of care indicators; availability of equipment and supplies in facilities; appropriateness of referrals; and client satisfaction.

Priority interventions:

- Family doctors at the PHC level who have successfully completed certified general FP training courses will provide the full range of family planning methods (*except for a few that will be indicated*) based on the PHC FP protocol, including emergency contraceptive methods.
- In order to be supportive of a client-centered and team approach to the continuum of care, the referral mechanism and feedback approach will be strengthened through:
  - Developing proper referrals at each level of the health system;
  - Improving the system's ability to transfer clients between the different levels of the health care system, and establishing appropriate linkages across levels of care in order to ensure efficiency in referrals;
  - Close coordination and collaboration with/among state and private healthcare providers, in order to reduce the financial barriers for the general public, and the poor in particular, as they seek to access higher levels of care.
- Integration of post-partum and post-abortion family planning with ANC and PNC counselling will be ensured.

Objective 2: By 2030 the quality of Family Planning services will meet international standards

Strategic Priority 1: Improve the competency of health service providers

Rational

Existence of qualified, licensed physicians and nurses at each level of the health system, skilled in provision of quality RH/FP services, is essential to the successful implementation of this Strategy. Therefore, improving the competency of health workers, including through ensuring that highly qualified providers are entering the health workforce, remains a key priority for strengthening family planning services.

Priority interventions:

- In order to ensure qualified providers entering the health workforce, enhancement/update of the FP-related undergraduate education curriculums for doctors, nurses and midwives will be undertaken.
- Family Physician training and education, as well as the curriculum for General Practice Nurses, will be updated/designed to ensure that PHC teams have the skills, in both clinical care and service management, required to provide quality, basic RH/FP services, according to the PHC FP protocol/SOP to be developed.
- Institutionalization of the CME system will ensure maintenance of necessary skills and competencies in the highly privatized health care system Georgia possess at the moment.
- MoLHSA will ensure improved competency of FP service providers through: (a) maintenance of a coordinated system for medical education, including CME; and (b) integrating standards and requirements for human resources in the selective contracting modality of state-funded health care services from private providers.

[82] The concept of quality includes adherence to approved, evidence-based clinical protocols and the principles of client-centered care.

- New and emerging technologies, including e-health and on-line learning courses in the provision of FP services in all parts of the country will be widely promoted and supported.
- Appropriate regulations will be developed and introduced, including performance based payment schemes, to incentivize service delivery personnel to use their skills to the full.

Strategic Priority 2: Advance public and patient education on family planning

Rational

The resources for health promotion and preventive care in Georgia are limited. The lack of emphasis on health promotion has resulted in a general population with very low levels of awareness regarding healthy preventive and care-seeking behaviors. The lack of knowledge about FP, particularly about modern FP methods, among the general population (*even 25 years after modern contraception started to become available*) still prevents people from making informed choices. This is a serious shortcoming in the current situation because informed choice of a range of (modern) FP methods is a cornerstone of satisfactory FP. (Potential) users, therefore, rely far too much on information of their (specialist) health care providers for many of whom FP is not their primary business or main interest. Moreover, still high levels of abortion and infection-related/secondary infertility in Georgia point to a critical need to balance resources and attention more rationally between promotion of healthy behaviors, preventive services and essential curative care.

Priority interventions:

1. State will increase the amount of resources allocated to preventive care and health promotion, to include essential RH/FP information and education.
2. MoLHSA/NCDC&PH will establish priorities for reproductive health communication and health promotion. Priority topics for health promotion will be identified using epidemiological information and data on coverage with key services, generated through the routine health information system and periodic population-based surveys.
3. Within the framework of national awareness raising strategy, multimedia campaigns will be launched for tackling existing and newly emerging myths and misconceptions about methods of contraception; as well as provision of practical information on FP service provision arrangements in the country to assist population in making informed choices.
4. MoLHSA/NCDC&PH will collaborate with media and NGO sector working in FP to undertake FP education for the general population and for specific target groups.
5. MoLHSA/NCDC&PH will collaborate with the Ministry of Education and Science in development of the comprehensive school education on healthy lifestyle, including RH issues, where age-sensitive FP education is included.
6. The relevant departments in the MoLHSA & NCDC will also assess the unique needs of men, adolescents and other special populations for reproductive health information.

Strategic Priority 3: Introduce and enforce regulatory and steering mechanisms for quality FP service delivery

Rational

Quality in family Planning can be defined as offering a range of services that are safe and effective and that satisfy clients' needs and wants. It can also be defined as "the way clients are treated by the system". Permanent improvement of service quality in FP sphere is very important in order to substitute induced abortion with modern methods of family planning. This process envisages revising existing regulations, adapting international guidelines to existing practice, strengthening surveillance and monitoring systems, capacity building of FP service providers. Experiences in the past have shown that planned changes in the health system require various incentives and regulatory mechanisms in order to succeed. However, because the health care system in Georgia is basically *privately organised*, regulation and steering instruments are mainly limited to setting and enforcing quality standards and introducing performance-based financing and selective contracting to improve the efficiency of service provision and quality of care. The revised system of accreditation and

licensing for health facilities and physicians in Georgia will enable the MoLHSA to ensure that RH/FP services are provided according to the internationally agreed standards of care.

Priority interventions:

- MoLHSA will facilitate development/adoption and active use of nationally approved clinical guidelines and protocols for each component of the RH/FP services, and ensure monitoring adherence through *selective* contractual service agreements and periodic inspection of facilities for licensing purposes.
- Modern methods of family planning (*IUD and oral contraception*) will be made available free of charge for beneficiaries of the Targeted Social Assistance (TSA) program and some other vulnerable population groups - women under the age of 21 years and/or students, HIV positive women, under the condition that contraceptive counselling and prescription have been carried out by PHC staff, or, if needed, after referral to a higher level specialist.
- Appropriate packages of stratified FP services providing necessary requirements for providing RH/FP services, including equipment, methods, infrastructure, and qualified and sufficient trained medical staff at the PHC as well as at the hospitals level, will be elaborated; and respective regulatory mechanisms/standards developed.
- Through involvement of private sector providers and managers, a minimum data collection tools for each level of care will be developed for collection and analysis of monitoring data on FP service quality and utilization; and integrated in the National Health Information Management System; the data will utilized in evidence-based decision making for quality assurance of FP services.
- Operations research and/or population-based surveys (MICS, RHS) will be conducted aiming at further improving the quality of service delivery and at identifying administrative and policy constraints, in order to be able to suggest solutions; along with development of knowledge and information dissemination tools and channels at all levels.

The Table below presents the ***impact indicators*** that the strategic interventions listed above for Family Planning are expected to affect, and the targets that are expected to reached as a result. These indicators should be used for impact evaluation during the period of implementation.

Objective and related impact indicators	Baseline 2016*	Target 2030
Family Planning services meet international standards and are easily accessible for all who need them		
% Pregnancies being unintended	37%	15%
Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods[83]	69%	85%
% Women who have received FP information from professional sources	17%	60%
Induced abortion rate per 1,000 women 15-49 years	56	25

* Latest available data in 2016

[83] Correspond to SDG Indicator 3.7.1: Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods - Georgia is committed to report upon.

4. SEXUAL AND REPRODUCTIVE HEATH (SRH)[84] of YOUNG PEOPLE[85]

4.1. Current SRH status of young people in Georgia

Adolescent girls are a special group at risk of maternal and infant morbidity and mortality. Pregnancy during adolescence is very often unplanned and unwanted, because girls and boys are not yet ready to start having a family, and therefore it damages their future life's outlook. As a result, the majority of pregnancies in girls under 20 years in European countries tend to end in induced abortions. Furthermore, young people are at increased risk of attracting STI or HIV infections because they are often not sufficiently prepared to protect themselves against it. For these reasons, young people's SRH has increasingly received attention from various (international) organisations in the past decades.

SRH of young people has until now been a rather neglected issue in Georgia. Research on young people's knowledge, attitudes and behaviour regarding sexual relationships, contraception or STI/HIV prevention is very limited. In fact, the latest research dates back to 2010, while it should be presumed that the topic is undergoing a process of rapid change. Also, National Youth Survey undertaken in 2013-14, covers some of these issues[86]. The most striking results of this older research have been that sexual behaviour of young people is a taboo issue, that can hardly be openly discussed, and that the issue is characterised by an extreme "double standard", in the sense that sexual behaviour of boys and young men is acceptable or even encouraged, whereas for girls and young women it is completely unacceptable. As a result of this, boys report quite extensive sexual experience and girls report none whatsoever. However, a critical analysis of research results has indicated that it is likely that boys tend to exaggerate their sexual experience and that girls massively underreport it, which was confirmed in a few focus group discussions with boys and girls. The analysis concluded that between 25% and 40% of unmarried girls and young women (aged 15-24 years) may have had one or more sexual contacts[87]. Existing research also indicates that young people's knowledge of sexual and reproductive health and prevention is generally very poor. This is mainly the result of a general lack of accessible sources of information, and total absence of SRH education in schools, although an attempt to start school SRH education has been recently started with assistance of UNFPA Georgia. The country also lacks special SRH services for young people that do exist in most other European countries. An attempt to create such services a few years ago proved to be unsustainable, due to various reasons, including privatization of the infrastructure.

One of the very few issues for which reliable data are available concerns births among adolescents[88]. The age-specific fertility rate among 15-19 year olds increased from 39.9 (per 1,000 women 15-19y) in 2000 to 51.5 in 2014. The latter rate means that by the time they reach the age of 20 years, roughly a quarter of young women have already given birth. The rate of 51.5 is very high for European standards; in almost all western European countries this rate is between 5 and 10, or 5 to 10 times lower than in Georgia. Even in southern European countries it is much lower: Greece and Spain: 10 and Italy: 7. In most European countries the abortion rate in this age group is about the same or higher

[84] The abbreviation "SRH" is used here, in line with the vast majority of international publications related to this topic.

[85] According to WHO definitions "adolescents" are 10-19 years, "youth" are 15-24 years, and "young people" are 10-24 years.

[86] http://unicef.ge/uploads/Final_Eng_Geostat_Youth_SitAN.pdf

[87] Evert Ketting. Possibilities for developing Youth-Friendly Sexual and Reproductive Health Services in Georgia; A Situation Analysis. UNFPA, Tbilisi: 2015 (internal report).

[88] National Centre for Disease Control and Public Health. Health Care; Statistical Yearbook 2014 Georgia. Ministry of Labour, Health and Social Affairs, Tbilisi 2015.

than the birth rate[89]. In Georgia, on the contrary, the *reported* abortion rate in this age group is only a quarter of the birth rate (13 per 1,000)[90].

Because young people's SRH is a sensitive and rather taboo issue in Georgia it is essential that the government assists in creating the moral space needed to make improvements in this field. The sheer absence of contemporary knowledge and understanding of young people's knowledge, attitudes, behaviour and information and service needs is a serious handicap for developing policies and programmes aiming at improving their SRH. It is essential that future research applies innovative and in-depth methodologies in order to generate *realistic* results. Issues that urgently require to be investigated include the correlates of early and informal marriage; sexual behaviour of unmarried young people (particularly girls); and the use of contraception and induced abortion in this group. Moral and practical support of the government is particularly needed in the process of introducing school-based Healthy Lifestyles Education[91] that has been started. An assessment of the possibilities of creating special youth-friendly SRH services had indicated that the conditions for this are not yet favourable[92]. Instead, it should be recommended that youth-friendly SRH services be developed as a special *function* of PHC, alongside their development as entry point and main provider of FP services. Finally, it would be very useful if the country learns from the experience of some other, comparable countries that have successfully developed Healthy Lifestyles education in schools and youth-friendly SRH service delivery, or both.

4.2. Objectives, approaches and priority interventions to improve young people's SRH

Objective 1: By 2030 young people will be sufficiently educated on SRH issues to preserve their own health and well-being

Strategic Priority 1: Strengthen Stewardship role of the Government of Georgia in improving SRH of young people.

Priority interventions:

1. All national documents will be reviewed by the MoLHSA MCH Council within MoLHSA, to ensure that youth SRH needs are clearly and adequately addressed, including PMTCT, VCT, ANC, emergency obstetrics, and others.
2. The government will stimulate and where possible support initiatives from the field to conduct high quality research on adolescent SRH.
3. The MoLHSA/NCDC&PH will collaborate closely with the Ministry of Education and Science (MoES) in further developing, piloting and implementing a school-based healthy lifestyle education programme, including elaboration of all educational materials needed for implementation of the Healthy Lifestyles Education pass-through Standard so that this programme is gradually integrated in the school curricula, and by 2030 all schools (including vocational schools) are implementing the programme.
4. The MoLHSA/NCDC&PH will collaborate with the MoES in strengthening school health system and developing capacity of school doctors on Youth SRH issues through supporting their training according to the accredited curriculum in this area.

[89] UNFPA. The power of 1.8 Billion; Adolescents, youth and the transformation of the future. UNFPA State of the World Population 2014.

[90] National Centre for Disease Control and Public Health. Health Care; Statistical Yearbook 2014 Georgia. Ministry of Labour, Health and Social Affairs, Tbilisi 2015.

[91] "Healthy Lifestyles Education" is the preferred term for educational programmes that include also other life's challenges besides SRH.

[92] Evert Ketting. Possibilities for developing Youth-Friendly Sexual and Reproductive Health Services in Georgia; A Situation Analysis. UNFPA, Tbilisi: 2015 (internal report).

5. The MoLHSA will create an enabling environment for the integration of youth-friendly SRH service delivery in PHC units.
6. A government and sector delegation will pay study visits to one or more eastern European countries with wide experience in developing and implementing high-quality school-based Healthy Lifestyles Education and youth-friendly SRH service delivery.

Since early 2015 a school-based Healthy Lifestyle Education Pass-through Standard has been developed through MoES and UNFPA collaboration, a draft version of which is now available. The programme is partly based on the WHO Europe Standards for Sexuality Education[93]. It is now ready to be tested in schools, after which next steps can be taken in the development process. It should be mentioned that research indicates that students in Georgia are clearly supporting SRH education in schools[94].

Strategic Priority 2: Advance Education and health literacy of young people on SRH issues.

Priority interventions:

1. NCDC&PH will prioritize and in collaboration with other stakeholders launch information campaigns for young people on various SRH issues, using the opportunities provided by the new (social) mass media, and telecommunication (mobile applications), interactive web platforms.
2. Through inter-sectoral collaboration, develop and implement educational activities in communities and for parents, on providing guidance to their children in the field of SRH.

University students are a category that is most likely to have sexual relations, and therefore SRH centres in (larger) universities will probably meet a real demand. It is advisable Youth Health-Lifestyle and SRH issues are integrated into the non-formal education national strategy and models, once developed. Finally, it is important that young people can easily find information about services that are meant especially for them. That information should be very practical. In-school and out-of school education should be equally strong.

Objective 2: By 2030 young people will have full access to SRH services that meet their needs

Strategic Priority 1: Provide SRH services for young people in a youth-friendly manner.

Particularly for young people PHC units have the advantage of being close to where they live. Because these centres deal with a wide variety of health issues it does not have to be immediately clear for what reasons young people attend them, which is important for guaranteeing confidentiality. Young people themselves (particularly peer educators) are very well aware of what makes a service attractive and efficient for young people and what the potential barriers are.

Priority interventions:

1. Create youth-friendly SRH service delivery as a special function in PHC units, and involve young people (particularly young peer educators) in their development.
2. Explore possibilities for creating a youth SRH information and service centre in one or two larger universities as a pilot project and evaluate it in order to find out if it can respond effectively to a demand for it.
3. Include young people as a special category in the programme of free of charge distribution of modern contraceptives.
4. Inform young people about available youth-friendly SRH services, through information materials distributed via schools, youth clubs etc. and by using various mass media.

[93] WHO Regional Office for Europe and BZgA. Standards for Sexuality Education in Europe. Federal Centre for Health Education, BZgA. Cologne: 2010.

[94] Kristesashvili J., L. Surmanidze, G. Tsuladze, L. Shengelia, P. Zardiashvili. (2009) Reproductive Health Initiative for Youth in the south-Caucasus. Adolescent Reproductive Health Survey Georgia 2009. Tbilisi, UNFPA.

5. Institute hot lines - they are mostly appropriate in urban areas, where adolescents can gather information and counselling.

The Table below presents the ***impact indicators*** that the strategic interventions listed above for SRH of young people are expected to affect, and the targets that are expected to reached as a result. These indicators should be used for impact evaluation during the period of implementation.

Objectives and related impact indicators	Baseline 2016*	Target 2030
Young people will be sufficiently educated on SRH issues		
% Adolescents having been taught healthy lifestyles education (including SRH) in school	0%	90%
Young people have full access to SRH services that meet their needs		
% 15-24 year old knowing they can get SRH services from their PHC centre/unit	Negligible	90%
Teenage pregnancy rate per 1,000 15-19 year old women	51.5	< 20

* Latest available data in 2016

5. Implementation and Management Mechanisms

The success of this Strategy starts with strong and consistent leadership from the Ministry of Labor, Health & Social Affairs (MoLHSA), who will not only oversee the implementation but will advocate, coordinate, collaborate and negotiate with the other partners to accomplish the tasks that are not under its direct responsibility. The MoLHSA will be responsible and accountable for providing oversight to effectively and efficiently implement the MNH Strategy, with following stewardship functions: (1) manage, coordinate and monitor implementation to ensure attainment of performance targets by a wide range of national and international stakeholders; (2) mobilize, monitor and ensure efficient use of resources; (3) formulate and implement enabling policies, laws, and regulations; (4) set guidelines and standards for programme and service delivery; and, (5) spearhead the performance monitoring of the key development interventions envisioned under this Strategy and consequent Action Plan (AP).

The current Strategy will be implemented by a broad group of multi-sectoral stakeholders, including related ministries and agencies, development partners, civil society, community-based organizations, professional associations, and the private sector, amongst others. Hence, from an operational perspective, implementation will require the adoption of multi-sectoral and decentralized approaches in the coordination and management of the national effort. All implementing and development partners will be convened under the Mother and Child Health Unit (including Family Planning) (MCHFP), under MoLHSA auspices. This group will play an advisory and guidance role to the MoLHSA and other stakeholders and support effective implementation of the MNH Strategy through a variety of approaches, as well as provide a forum for stakeholders to share information and technical updates. MCHFP will draw representation from government, civil society/nongovernmental organizations, development partners, and the private sector.

A clear and active coordination framework at all levels of the MoLHSA and it's affiliates is necessary to prevent duplication of efforts, enhance efficient use of resources, track progress and results, and facilitate knowledge sharing: (a) National Drug Authority - State Regulation Agency for Medical Activities to ensure the quality, safety, and efficacy of contraceptive commodities by regulating their production, importation, distribution and use. Also, ensure that *the future* national list of essential drugs features an adequate mix of priority contraceptive products according to the established needs

of the population; (b) Social Service Agency to coordinate the implementation of the programs of the socio-community support to the woman during the pre-conceptional, ante-, peri-, and postnatal periods with the social assistance and family protection services; (c) National Center for Disease Control to provide core health statistics crucial for monitoring and evaluating the Strategy implementation.

In pursuing and accelerating Strategy implementation progress towards the Vision 2030, MoLHSA will actively coordinate with the Government Administration and Parliament of Georgia. Key line ministries and institutions shall also contribute to the achievement of results in accordance with their respective mandates, including: Ministry of Finance, Ministry of Education & Science, Ministry of Sport & Youth Affairs, etc. The MoLHSA will encourage and provide technical support to these ministries to mainstream MNH&FP issues in their core functions; deliberate effort shall be made to mainstream Action Plan activities in sectoral plans and budgets—for resources to be set aside to promote MNH/FP in respective sectors. Consistent with the Government policy on decentralization by devolution, the MoLHSA will work with partners to provide guidance and technical assistance to local government authorities to facilitate the translation of MNH Strategy results and activities at the district level and ensure that annual budget requests to the Medium Term Expenditure Framework from the district level includes MNH topics.

Through academic institutions and professional bodies, the MoLHSA will monitor compliance with the laws and set standards to allow the Ministry to concentrate on policy and strategic issues. Development partners and UN agencies are also considered as instrumental players in the successful implementation of the Strategy through providing the necessary financial resources and technical expertise. Civil society entities will also complement the public sector in delivering services at facility and community levels, mobilize resources, and exercise their role as advocates by playing the role of a "watchdog" to ensure social accountability and responsibility.

Success will likewise require partnerships with media, religious leaders and the private sector. Given that over 90% of healthcare providers in Georgia are privately owned, collaboration with the latest will be essential in ensuring that national standards of care are maintained. In addition, the private sector needs to be especially involved in the provision of pharmaceuticals and family planning methods. Strategies that will be adopted include building capacity of private providers in how to effectively engage in public-private partnerships, as well as how to deliver the essential package of MNH & FP interventions.

6. Risk Assessment

In developing the MNH Strategy, following **key assumptions** were made regarding its success.

- Political, social and economic stability.
- Commitment by the public, private and civil society sectors to make positive change to adopt new policies and institutionalize successful initiatives that serve MNH&FP improvement.
- Perception and awareness of people working in this area of the importance of scientific research and data in making decisions and supporting policies.
- Continuity/Retention in providing qualified health providers and availability of financial resources.

In addition, a number of **risks** that could affect implementation were also identified, namely:

- Change in the economic and political situation in the country.
- Lack of allocated financial and human resources and reliance on donors.
- Loss of motivation and commitment by decision-makers, and turnover of decision-makers.
- Resistance to change and slow changes in behavior and attitudes among providers, clients and the community.

- High cost of awareness programs, especially those that use informational materials.

7. Monitoring and Evaluation

The success of this Strategy in achieving the purpose for which it was developed depends on the regular monitoring of indicators to measure the progress achieved in the implementation of the intervention and the results set. The MoLHSA shall assume responsibility for the monitoring and evaluation and execution of this Strategy. Effective M&E will be conducted both by regular monitoring and by periodic surveys.

All implementing partners will be expected to collect information on process indicators relevant to the activities they implement. It is expected that this information will be reported as per the time schedule and in a format, which will be standardized for purposes of uniformity in data capture, analysis and management. Monitoring data will include more proximate set of indicators to measure process and output (*outlined in the AP)*. Population-based surveys that will be undertaken during the Strategy implementation period (*ex. RHS*) will include impact and outcome indicators (*mentioned above)*, wherever possible. When an important question related to the Strategy arises for which monitoring and surveys do not provide the answer, operational research may be employed. Advantage will also be taken to collaborate with ongoing or planned national surveys by the National Statistics Office (*GeoStat*) to measure some of these impact indicators.

The data from these sources will be fed back to relevant levels, from health facilities to the national level, to be used in regular progress reports, quality assurance and planning activities (*ex. in the preparation of the next work plan*). In this regard, the MoLHSA will also revise and strengthen the system to provide useful feedback to all levels of the health system with an eye to improving its performance.

Evaluation is an important component of any programme implementation and management. The Strategy will be evaluated and amended if necessary, through:

1. Annual review of performance indicators/outputs: the MoLHSA will convene a joint review meeting to assess the progress of the Strategy implementation against targets and agree on priorities for the upcoming period. These meetings will therefore serve as a key accountability mechanism to assess implementation of the plan and outputs/outcomes; as well as to make recommendations for the next annual work planning cycle or long-term strategic planning.
2. Mid-term review of the Strategy: The Strategy will be evaluated halfway through the Strategy's life (2017-2030) in 2025, the results and recommendations will be used to amend interventions and revisit the Strategy if needed.
3. Final evaluation, before starting preparations for the following strategy, in order to include the lessons learned.

These steps will constitute the basis for monitoring and evaluating the National MNH Strategy for 2017-2030 to ensure that efforts implemented conform to the plan and that results achieved align with performance targets.