Impact Evaluation of the Swiss supported Reproductive, Maternal and Child Health programme in Ukraine

Final report

Acknowledgments

This report is the product of an external evaluation of the Reproductive, Maternal and Child Health programme in Ukraine, which has been implemented with the financial support from the Swiss Agency for Development and Cooperation (SDC).

The authors are grateful to everyone who took time from their busy schedule to interact with the evaluation team, provided information and answered pertinent questions that laid the groundwork for this report.

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We are particularly grateful for the excellent support and cooperation by all stakeholders and frontline workers. It has been a delight to work with such enthusiastic and committed colleagues.

We are hopeful that the findings and recommendations of this evaluation will help to ensure the continued support of SDC, MoH and all health staff to improve the care for mothers, children and all citizens of Ukraine throughout the country and that the lessons learned may help to improve future health programmes in Ukraine and elsewhere.

Kiev, November 2017,
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Acronyms

ALL	Acute Lymphocytic Leukaemia
AML	Acute Myeloid Leukaemia
CCUP	Comprehensive Care for Unwanted Pregnancies programme
CPAP	Continuous Positive Airway Pressure (non-invasive ventilation)
C/S	Caesarean Section
CWBF	Child Well-Being Fund
EVA	Electric Vacuum Aspiration
FD	Family Doctor
GDP	Gross Domestic Product
HPC	Health Promotion and Communication programme
HTM	Health Technology Management software
KAP	Knowledge, Attitude, Practice survey
KMC	Kangaroo Mother Care
MA	Medical Abortion
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MMR	Maternal Mortality Rate
MoH	Ministry of Health
MVA	Manual Vacuum Aspiration
NCD	Non-Communicable Disease
NGO	Non-Governmental Organization
NICU	Neonatal Intensive Care Unit
NMR	Neonatal Mortality Rate
OBGYN	Obstetrics and Gynaecology
PAP	Papanicolaou Test
PH	Public Health
PIO	Project Implementation Office
PPP	Purchasing Power Parity
R-MCHP	Reproductive Maternal and Child Health Programme
SCO	Swiss Cooperation Office in Kiev
SDC	Swiss Development and Cooperation
SDG	Sustainable Development Goals
SIDS	Sudden Infant Death Syndrome
SVD	Spontaneous Vaginal Delivery
TOP	Termination of Pregnancy
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WB	World Bank
WHFP	Women Health and Family Planning, NGO
WHO	World Health Organisation

0. Executive summary

Background

SDC has been supporting the health sector in Ukraine since 1997, aiming to improve the health of mothers and children by providing effective and efficient health services and promoting health prevention measures. Over 14 million CHF were invested in the past 10 years into three components of the R-MCH project aimed at (1) improving quality of care for mothers and newborn babies, particularly the ones being born prematurely, (2) improving the safety of abortions saving women from dying due to unsafe procedures and (3) promoting health communication and prevention measures such as vaccination against common childhood illnesses.

As the last R-MCH interventions supported by SDC were completed in September 2017, it is important to document results, lessons learned and challenges. The scope of this external evaluation is to assess and document the impact of the R-MCH interventions from 2008 to 2017 at the policy, institutional (MoH, Oblast Health Administrations, Rayon Hospitals) and beneficiary levels (women, their partners and children as well as health professionals).

Methodology

The external evaluation used a generic framework to assess the logical relationships between inputs, processes, outputs, outcomes, and impact, and sustainability of the program. During in-country work, primary data was collected - obtained through interviews with health care managers and providers, beneficiaries and other key informants - using semi-structured questionnaires, focus group discussions and direct observation. Secondary data was gathered from progress reports, reviews and reports of previous missions as well as national level data.

Findings

Relevance and inputs

The programme's objectives, plans and activities were aligned with national and international goals and strategies. The programme was integrated within the country´s health system and also aligned with the country´s international commitments and goals, such as the MDG 4 and 5 and SDGs. The R-MCH activities were appropriately designed and were and remain still today relevant to the country's needs and government policies. Plans, activities and inputs were largely consistent with their intended outputs and outcomes. The introduced simulation-based training approaches inspired other disciplines and institutions to adopt similar approaches and parts of the health communication and promotion trainings reportedly covered two thirds of the oblasts and campaigns, MoH orders and national protocols were distributed nationwide. However, not all of the project components were designed to achieve nationwide scale up (see effectiveness). While the stated objectives of the programme were to decrease maternal and perinatal mortality at national level, the programme design would influence rates mainly at the level of rayons and oblasts that were covered. Thus, there is a mismatch between stated objectives for change at national level and implementation and effects mainly at regional level.

Efficiency and Outputs

The programme was managed most competently, carrying out activities according to plan, using available resources efficiently and in close collaboration with MoH and local public authorities and institutions at oblast and rayon level. Examples for efficient working

mechanisms include cost-sharing with government institutions responsible for renovation of facilities receiving donated equipment and working through existing structures and capacities to raise awareness and promote health activities.

The programme employed a multi-stakeholder approach by working with a variety of national and international organizations with a mandate in the same area, such as UNFPA or USAID, to advocate for change at the national level and avoid duplication at the regional level. Stakeholders unanimously acknowledged and highly commended the flexible and needs-based approach taken by SDC to address arising challenges and threats (i.e. polio outbreak, political opposition to abortion, violence etc.) and additional support provided during the time of the Euromaidan and the conflict in Crimea and Eastern Ukraine.

Effectiveness

The most evident results at institutional level include capacity for implementation of the perinatal service package, safe abortion procedures and communication, as example for the latter, key informants assert that the imminent ban of abortion was averted owing to the capacity that had been built by the Comprehensive Care for Unwanted Pregnancies project (CCUP).

Most important results at the beneficiary level include the family-centred approach to delivery care, improved access to and quality of perinatal and safe abortion care.

As may be expected of any program with such a comprehensive approach operating in a challenging environment, not all of the numerous interventions could be fully implemented. Despite significant improvements, access was still somewhat limited for mothers and families to their newborns on neonatal intensive-care-units (NICUs) in the visited sites, Kangaroo Mother Care (KMC) was not routinely implemented and some equipment had broken down over time with difficulties to organise repairs or replacement. The software for inventory and maintenance of medical equipment, 'openMedis', introduced by the program was no longer used in the visited sites, the use of the application introduced for e-learning could not be ascertained and the iPath telemedicine server no longer operational. However, important information including programme documents, clinical guidelines and all national protocols developed with the support of the program are still freely available and can be downloaded from the MCH project website (www.motherandchild.org.ua).

Outcomes

Spontaneous vaginal deliveries increased from 65% to 71% and partner deliveries from 67% to 87%, reaching average international levels. While vaccination rates were historically very high in Ukraine, they deteriorated around 2008 reportedly due to vaccine shortage and mainly due to mistrust of providers and parents in the quality of vaccines. Improved counselling skills and evidence-based information on vaccination for parents and health practitioners lead to increased vaccination rates in selected oblasts covered by the SDC program. Through communication campaigns and activities implemented by UNICEF as part of the SDC funded HPC programme, coverage has not yet reached pre-2008 levels. Reported abortion rates decreased during the program period at national level from 1121/ 1000 live births in 1997 to 166/1000 live births in 2013 (latest data available).[1] [2]

[1] Source: WHO/Europe, European HFA Database, July 2016, accessed 05.October 2017 at http://data.euro.who.int/hfadb/

Impact

Reported maternal and infant mortality rates decreased during the programme period at national level from 25.8 maternal death/100 000 live births in 1997 to 14.8 in 2014 (latest data available) and infant death from 14.2/1000 live births to 7.9 respectively.[3]

According to the programme/MoH data, maternal mortality ratio due to unsafe abortion decreased from 9.2% in 2009 to 5% in 2013 nation-wide and from 2010-2014 from 9.9% to 3% in pilot oblasts. Albeit difficult to quantify, the contribution of SDC´s programme to these considerably improved national indicators for maternal and infant health is plausible.

Given the very successful implementation of all three projects of the programme in the targeted rayons, the decision to not scale up some of the interventions beyond the pilot oblasts during the scale-up phase remains regrettable. By limiting the scale-up of the pilot projects to the remaining rayons of the same oblasts, the impact on the stated aim of the programme 'improving mortality rates of mothers and infants nationally' was limited. Additionally, this might have contributed to an increase in disparities of health indicators between different oblasts as project oblasts and institutions were chosen based on good governance and best academic reputation, raising possible concerns about equity.

Particularly, the decision to not scale up the cost-effective and well-accepted procedure of safe abortion to the remaining of the country remains unfortunate.

Sustainability

A key focus of the programme throughout the planning and implementation phases was the sustainability of all initiatives. This may be well achieved particularly for interventions related to capacity building, transfer of knowledge and clinical skills, as well as changing the mind-set of clinicians and administrators to work more patient-centred and evidence-based.

At national level, orders and protocols were developed and adopted by the MOH and training courses integrated in the curricula of some universities and post-graduate training institutions to ensure sustainability. Given the frequent changes of the health administration at national and oblast level (the current health minister is the 25th minister of health since independence in 1991) it is unclear if other programme components such as implementation of agreed standards and training- and communication efforts will be continued and scaled up to other oblasts.

The purchase of high-tech equipment for clinical simulation trainings raises some concerns regarding the sustainability of the intervention as maintenance of equipment and procurement of spare parts is reportedly challenging. For example, during key informant interviews it became apparent – while the equipment is still being used and well-maintained three years after its purchase - no funding seems to be available to replace more expensive items that are broken. The sustained implementation of Information and Communication Technologies (ICT), including telemedicine and tele-teaching, could not be confirmed at the visited sites.

[2]It has to be noted that underreporting is likely taking place: according to key informants, a large proportion of abortions are carried out within the private sector and not being reported; particularly medical abortions are considered to be underreported.

[3] Source: WHO/Europe, European HFA Database, July 2016, accessed 05 October 2017 at http://data.euro.who.int/hfadb/

Recommendations for strategic orientation

SDC should build on momentum gained

1. While access to quality perinatal and safe abortion care has significantly improved in the public institutions during the period of the program, key informants reported that unofficial and non-transparent co-payments remain a persisting issue. While this concern is beyond the immediate scope of the programme, it limits the access to health care for women and families, who are asked to pay out of pocket for services, essential drugs and consumables, such as access to the family rooms, milk pumps, non-reusable consumables, antibiotics, etc. With considerable investments made, a high regard amongst partner organisations and national health administration and a good reputation of the program, SDC should leverage its influential position to remind the MoH to honour commitments made, level up expenditure for health as % of public expenditure and GDP to meet European averages (see Figure 10 and 11) and ensure sustainability of the achievements made.

SDC should influence the on-going health systems reform

2. SDC is well-positioned to influence the on-going health system reform and urge the MoH to:
    - Ensure the consistent use of quality improvement mechanisms to improve health care services
    - Ensure adequate maintenance and repair of equipment
    - Improve routine data collection and use for planning of health services
    - Address the increasing role of private sector (currently largely non-regulated) and for-profit medicine in government facilities in forms of non-transparent co-payments for basic medical services.

SDC should - while moving to new priorities - keep an eye on the unfinished agenda

While currently less of a priority on the global health agenda and after losing the maternal and child health department in the MOH, there is currently no institution that champions mother, child and adolescent health in Ukraine. This risks that this issue will fall of the radar and significant improvements are lost over time. It is therefore recommended to SDC to:

3. Scale up: Consider increasing the reach of the project by encouraging simulation centres to run trainings for health staff from other oblasts (currently, centres are utilized only some days/week by staff from the same oblast).
4. Strengthen efforts for vaccination to meet European standards: While health promotion communication activities improved vaccination rates, they are still the lowest in Europe and require on-going attention for the country to benefit from this most effective public health intervention. Vaccination against HPV is currently not systematically available in the country and would constitute a clear overlap to the NCD agenda as it prevents cervical cancer (in a country where screening through PAP test[4] for early detection is not available). However, before introducing new vaccines as part of the government health care services, improved uptake of the existing vaccine schedule needs to be ensured by reducing barriers to universal coverage.

[4] Papanicolaou (PAP) test is a method of cervical screening used to detect potentially pre-cancerous and cancerous processes in the cervix.

5. Strengthen efforts for promotion of breastfeeding: Breastfeeding, a cost-free health intervention, is known to reduce rates of breast- and ovarian cancer. It increases post-delivery weight loss of mothers, decreases the risk of developing type-2-diabetes, rheumatoid arthritis, and cardiovascular diseases[5]. It reduces rates of obesity in childhood and adolescence, inflammatory bowel disease, leukaemia, diabetes mellitus type-I and-II, while significantly improving cognition and learning/school outcomes.[6] The overlap with the NCD prevention is self-evident and constitutes an excellent opportunity to keep a finger on the pulse of perinatal care while moving the NCD agenda.
6. Improving adolescent health is key to achieving NCD targets and SDC´s experience on improving adolescent health in the region should be capitalized upon, as should the capacity built within the framework of the health promotion communication component.

SDC should implement lessons learned

7. While designing and implementing the NCD project, scale up should be planned for from the outset[7] and equity considerations kept in mind. If the project cannot cover the whole country, as it is very large, provisions should be made how to ensure equitable provision of services to the entire population, by for example working with the Ministry of Health and/or other donors covering the remaining part of the country. A systematic logic model of objectives, input, output, outcome, impact and sustainability should be employed and fewer indicators selected in order to be rigorously followed through.
8. Evidence shows that printing and distribution of guidelines alone does not yield effects on improving health workers performance[8] (see also Figure 12) and thus it will be key to continue implementing trainings and quality improvement approaches along with guidelines distribution.

Conclusion

SDC's long-term support led to substantial and sustainable improvements in perinatal care, comprehensive care for unwanted pregnancies and health promotion, with significantly improved health outcomes for mothers and newborns, as reflected in improved maternal and infant health indicators.

The efficiently implemented program was and remains relevant for the country´s context, aligned with national and international goals and highly regarded by all stakeholders.

Given the considerable investments made, the high regard amongst partner organisations and stakeholders, SDC should leverage its influential position to remind the MoH to meet commitments made, level up expenditure for health as % of GDP to meet European averages and ensure sustainability of the achievements made. SDC may also consider directing part of its continued support in Ukraine towards maintaining achievements made, given its prime position in doing so.

[5] Chowdhury R Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. Acta Paediatr. 2015 Dec;104(467):96-113. doi: 10.1111/apa.13102.)

[6] Amitay EL et al., Breastfeeding and Childhood Leukaemia Incidence: A Meta-analysis and Systematic Review JAMA Pediatr. 2015 Jun;169(6):e151025.

[7] WHO, Beginning with the end in mind Planning pilot projects and other programmatic research for successful scaling up, ISBN 978 92 4 150232 0, World Health Organization 2011

[8] Rowe AK, Rowe SY, Peters DH, Holloway KA, Chalker J, Ross-Degnan D. The Health Care Provider Performance Review: a systematic review of the effectiveness of strategies to improve health care provider performance in low- and middle-income countries. Database created on [add date of the database, e.g., March 23, 2015] and provided by Dr. Samantha Rowe, US Centers for Disease Control and Prevention, Atlanta, Georgia.

1. Background

Ukraine inherited an extensive and highly centralized Semashko inspired health care system (a hierarchical, nationally-controlled system staffed by state employees)[9].

The first years after the independence gained in 1991 saw a collapse of both the economy and living standards, which led to a deterioration of some of the most important health indicators with average life expectancy at birth falling to 66.9 years (61.3 for men and 72.6 for women) in 1995.[10]

This is the background situation when SDC in 1997 started supporting the health sector in Ukraine, aiming to improve the health of mothers, fathers and children by providing effective health services and promoting health prevention measures.

There has been considerable decentralization in the system since independence; however, decentralization has mostly meant de-concentration of functional and managerial powers to regional and sub-regional levels.[11] Regional and local health authorities are responsible for health care facilities in their territory and are functionally subordinated to the MoH, but managerially and financially answerable to the regional and local governments. Ukraine is divided administratively into 27 regions: the Crimean Autonomous Republic, 24 oblasts (regions) and two city authorities (Kyiv and Sevastopol); 69% of the population live in urban area.[12] The Crimean Autonomous Republic and Sevastopol city have been under the de facto control of the Russian Federation since March 2014 and parts of Donetsk and Luhansk oblasts have been beyond the reach of the Ukrainian authorities due to the on-going conflict since April 2014.

Over 14 million CHF were invested in the past 10 years into three projects aimed at (1) improving quality of care for mothers and newborn babies, particularly the ones being born prematurely, (2) improving the safety of abortion saving women from dying due to unsafe procedures and (3) promoting health communication and prevention measures such as vaccination against common childhood illnesses.

Interventions were specifically aimed at improving continuous medical education, updating clinical protocols, improving skills of medical staff in performing screenings, diagnostics, patient consultations and timely referrals, as well as upgrading clinical infrastructure and equipment. As part of the skills improvement, four perinatal simulation centres were established. The reproductive health programme developed a new national protocol for comprehensive care for unwanted pregnancies (CCUP) and established 5 model clinics in the oblasts of Poltava, Odessa, Vinnytsia, Donetsk and Kyiv city, to provide and teach safe pregnancy termination methods. Information campaigns using different channels and target groups were launched and actively supported by the implementing partner of the HPC project on topics such as healthy pregnancies, vaccination and infant health. As the last R-MCH interventions supported by SDC were completed in September 2017, it is important to document results, lessons learned and challenges.

[9] Lekhan VN, Rudiy VM, Shevchenko MV, Nitzan Kaluski D, Richardson E. Health Systems in Transition Vol. 17 No. 2 2015, Ukraine Health system review, 2015; 17(2):1-153.
[10] ibid
[11] ibid
[12] ibid

The scope of this external evaluation is to assess and document the impact of the R-MCH interventions from 2008 to 2017 at the policy, institutional (MoH, Oblast Health Administrations, Rayon Hospitals) and beneficiary levels (women, their partners and children and health professionals).

Objectives of the evaluation

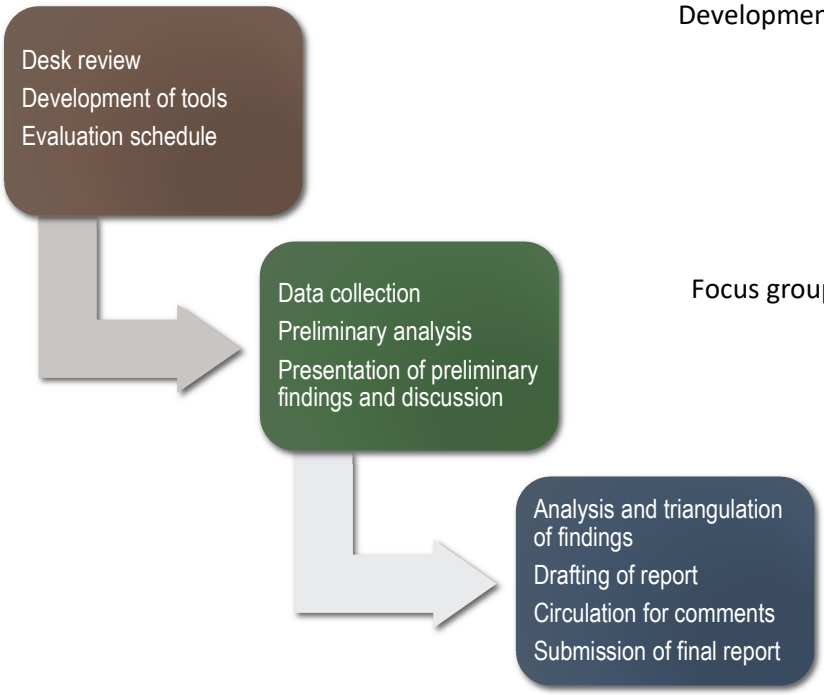
The main objective of the impact evaluation is to assess and document the impact of the R-MCH interventions, and more specifically:

- To assess the relevance, effectiveness and efficiency of the R-MCH interventions with regards to reproductive, maternal and child health services provision in Ukraine.
- To assess the achievements of the projects' over all phases compared with their objectives.
- To assess and document changes in the perinatal care service provision, based on field observations, available statistical data, and interviews with medical personnel and primary beneficiaries.
- To assess and document the population's behaviour change with regards to reproductive, maternal and child health related issues (i.e. family planning, health care seeking behaviour, role of men in pregnancies and deliveries, vaccination, etc.), using available data sources and surveys carried out within the past and the on-going projects' implementation.
- To evaluate and document the organizational development of perinatal care delivery model, its sustainability and its replication at the national level.

2. Methodology

Proposed process

Figure 1: **Proposed process**



Preparatory phase

Desk review of available information and documents
Development of evaluation tools and questionnaires
Ethical clearance
Agreement on evaluation schedule

In-country phase

Data collection:
Key informant interviews;
Focus group discussions and observation/ site visits
Preliminary analysis
Presentation of findings and discussion

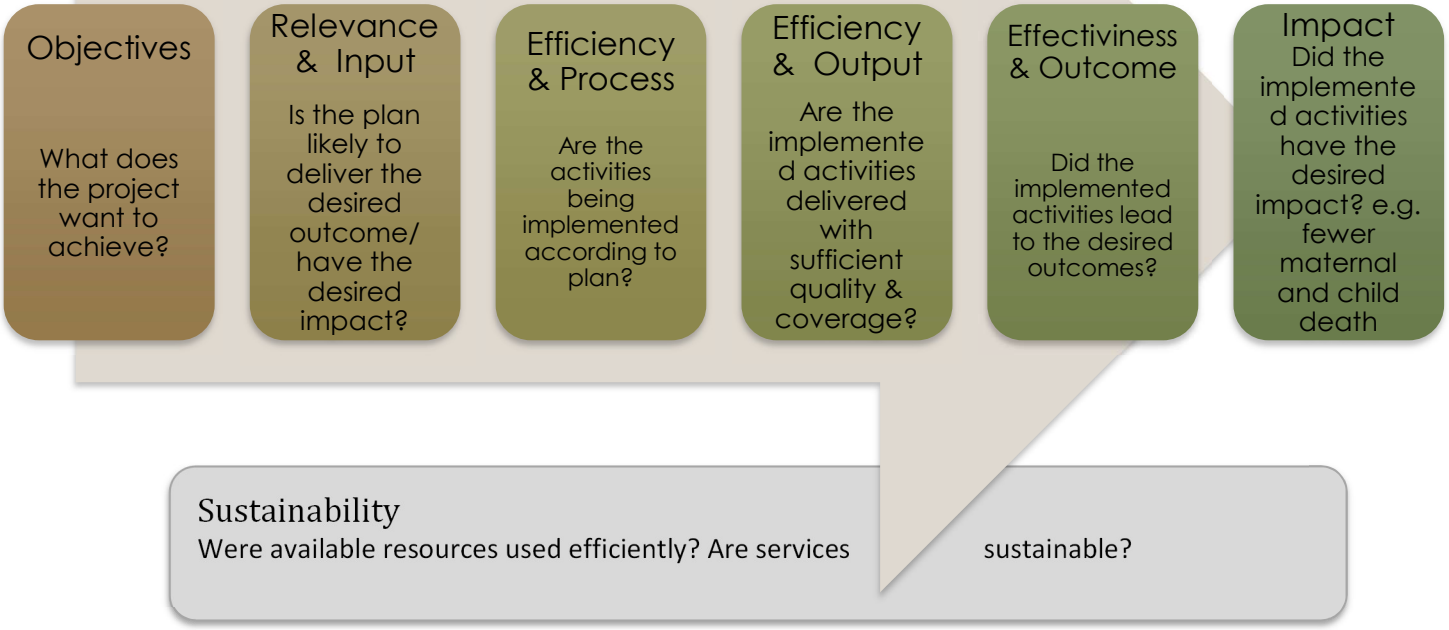
Collation and reporting phase

Analysis and triangulation of findings
Drafting of report
Circulation for comments
Submission of final report

Evaluation framework

According to the DAC criteria, an impact evaluation assesses the positive and negative, primary and secondary long-term effects produced by the development intervention. Based on the DAC criteria, the evaluation will inquire the following questions:

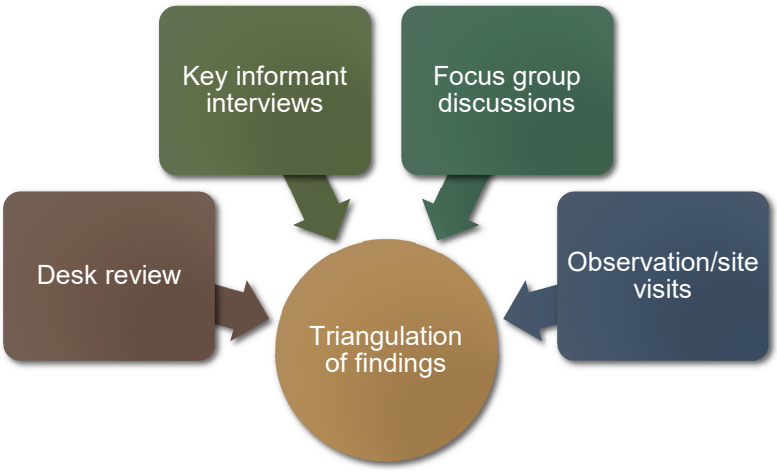
Figure 2: Evaluation framework



Methods

Methods to carry out the external evaluation will include a desk review of available documents and information, site visits to model clinics and selected health services, in-depth interviews and focus group discussion with key informants such as policy-makers, health care providers, as well as beneficiaries, patients, partners, children and carers.

Figure 3: Methods



Ethical Considerations

While designing the evaluation methodology, the UNEG ethical guidelines[13] for evaluations were consulted and the following principles were followed throughout the evaluation:

- Evaluation procedures (focus group discussions and key informant interviews) were kept as brief and convenient as possible to minimize disruptions in respondents' life and work processes
- Participants of focus group discussions and key informants were informed about the purpose of evaluation, the process and duration of interview and/or FGD and consent was obtained
- Respondents were also informed about confidentiality and their rights to retain from answering any questions and discontinuing the interviews /discussions at any time
- Identities of key informants and participants of focus groups discussion will not be revealed nor statements attributed to a source
- Information were analysed and findings reported accurately and impartially

Limitations of the evaluation

We acknowledge a number of limitations that have had an effect on this evaluation. The evaluation was carried out over a brief time period, which limits the justice that the results can do to such a complex and multi-facetted project that was implemented over many years. We only talked to selected key informants and stakeholders, whilst the project interacted with many more and had many beneficiaries. We are thankful for the expert translation provided throughout the visit by excellent translators but acknowledge the potential risk of misinterpretation and loss of information. Equally, we were only able to review and appreciate documents and legislation that were written in or translated into English. Many more documents in Ukrainian remained out of reach.

3. Findings

Stakeholders

1 Ukrainian Mother and Child Health Programme, (MCH) 2008-2015
Swiss Centre for International Health, Swiss Tropical and Public Health Institute; Child Well-being Fund (CWBF), WHO, MoH and affiliated services, the Ministry of Social, for Education and Youth, Family and Sport, USAID, UNICEF, EU, WB,

2 Comprehensive Care for unwanted pregnancies (CCUP); 2009-2014
NGO "Women's Health & Family Planning", Vinnytsia Regional Family Planning Association, Vinnitsa Medical University, Donetsk National Medical University, Postgraduate Education Department, National Medical Academy for Post-graduate Education (NMAPE), Ministry of Health of Ukraine, World Health Organization

3 Health Promotion and Communication in R-MCH (HPC); 2011-2017;
UNICEF
Main National Partners: Ministry of Health (MoH), Ministry of Social Policy (MoSP)
Main International Partners: Swiss TPH, WHO, WB, USAID, National "New Life Project"

[13] http://www.unevaluation.org/document/detail/102

R-MCH portfolio

The projects subject to the impact evaluation are the following:

2008-2010 Mother and Child Health Programme I
Implementer:
Swiss Tropical and Public Health Institute (Swiss TPH)
Child Well Being Fund (CWBF))
Geographical coverage:
Nationwide for the policy dialogue component; 22 rayon's within the Oblasts Ivano-Frankivsk, Volyn, Vinnytsia and the Autonomous Republic of Crimea for the Mother and Child Health Promotion, Integrated Perinatal Care, Information and Communication Technologies and Mother and Child Health Services Management Components.
Funding through SDC:
CHF 3.700.000

2009-2015 Comprehensive Care for Unwanted Pregnancies I & II
Implementer:
Women's Health and Family Planning NGO (WHFP)
World Health Organization Country Office Ukraine (WHO)
Project Description:
Main objective of the project/programme: "Improved quality, efficiency and access to comprehensive care for unwanted pregnancies services in Ukraine"
Geographical coverage:
Nationwide for the policy dialogue component; 5 regions of Vinnytsia, Donetsk, Odessa, Poltava and Kyiv city for the CCUP services provision.
See also: www.reprohealth.info
Funding through SDC:
CHF 1.730.000

2011-2015 Mother and Child Health Programme II
Implementer:
Swiss Tropical and Public Health Institute (Swiss TPH)
Project Description:
The overall goal of the project is to improve quality, efficiency and access to maternal and child health services in Ukraine.
Geographical coverage:
The project implementation strategies aim at improving the quality and efficiency of perinatal services across 71 rayons of the four partner regions – AR of Crimea, Ivano-Frankivsk, Vinnytsia and Volyn' oblasts, and at the same time are geared towards the creation of an enabling environment for the modernisation, respectively reform of perinatal services countrywide.
http://motherandchild.org.ua/
Funding through SDC:
CHF 6.230.000

2011-2017 Health Promotion and Communication

Implementer:

UNICEF

Project Description:

Main objective of the project: The reproductive health and mother and child health of the Ukrainian population is improved through the adoption of healthier behaviours and better child care.

Geographical coverage:

Nationwide for the communication component; 16 rayons within the Oblasts Ivano-Frankivsk, Rivne, Zhytomyr and the Autonomous Republic of Crimea

Funding through SDC:

CHF 2.430.000

A. Relevance

Relevance: The extent to which the project was relevant at time of conceptualization, and suited to priorities and policies of the health sector and to the population needs. Critical evaluation of the quality of the design, including: objectives and results consistent with and supportive of Government policies; assessment of the quality of the intervention logic/results chain as designed upfront and related indicators of success. The additionality of the project compared to similar programmes supported by other donors should be assessed, if relevant.

Relevance and input

The projects´ objectives, plans and activities are aligned with national and international goals and strategies. The project is integrated within the country´s health system and also aligned with the country´s international commitments and goals, such as the MDG 4 and 5 and the SDGs. The R-MCH activities were appropriately designed and were and remain still today relevant to the country's needs and government policies. Plans, activities and inputs were largely consistent with their intended outputs and outcomes.

The project directly addressed several of the country's most pressing needs:

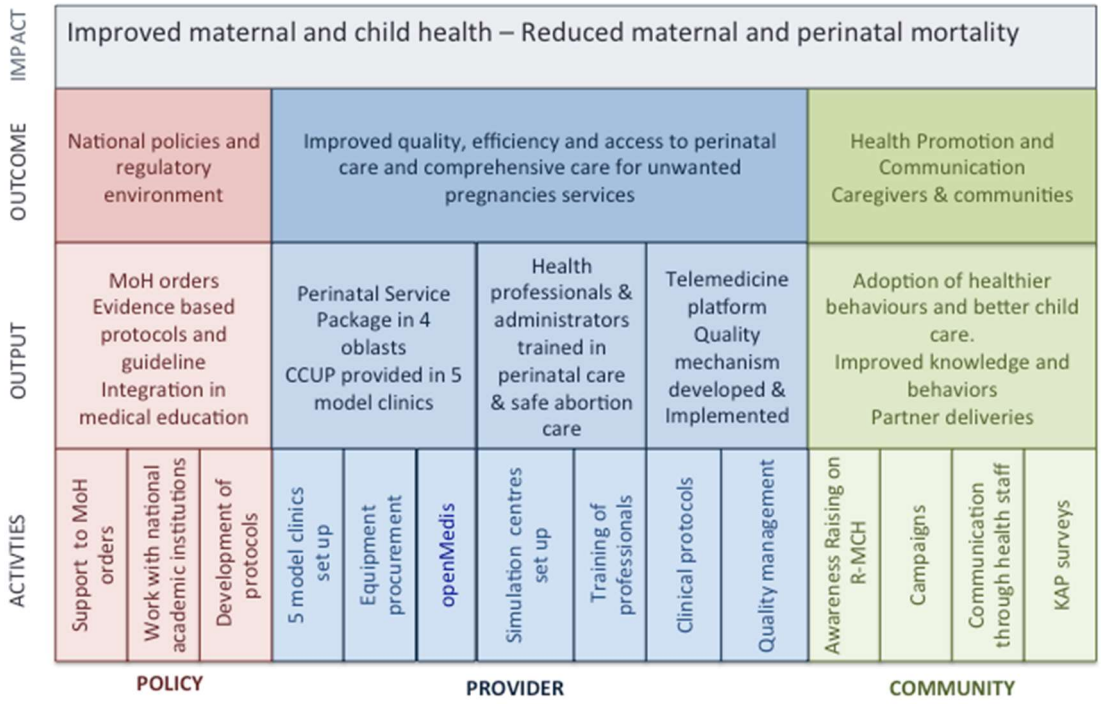
a) One of the most serious concerns faced by the health care system reform was the *skill level of many health care workers who are often underpaid and lack incentives for professional development.* The project aimed at increasing skill levels by setting up state-of-the-art training facilities and conducting simulation-based trainings, by developing and introducing new or updated guidelines at national level, by supporting participation of relevant staff in conferences in Ukraine as well as international conferences and supporting visits by foreign experts for exchange and introduction of up-to date and evidence-based techniques.

b) *Strengthening capacity of primary care providers by increasing the importance of health promotion and communication* focusing not only on clinical communication trainings but also on communication for health promotion and prevention. The program component

implemented by UNICEF trained many clinicians and build capacity to work more efficiently in the primary health care sector promoting vaccination, safe pregnancy and partner delivery.

c) *Investing in modern technology and equipment.* Due to the low investments into the health care system overall for many years, coupled with a severe economic crisis and ongoing conflict in Eastern and Southern Ukraine, investments into health care infrastructure and medical equipment have been lacking over the last years. SDC offered financial and technical support to purchase needed medical equipment if partner hospitals and administrations agreed on rehabilitation of the maternal and neonatal departments. This was highly successful and added to the increased motivation of health care workers and in many ways was crucial to enable the improved care for mothers and children.

Figure 4: Overview of the logic model of the R-MCH programme



Source: Developed by the evaluation team

The introduced simulation-based training approaches inspired other disciplines and institutions to adopt similar approaches and parts of the health communication and promotion trainings reportedly covered 2/3 of the oblasts and campaigns and developed MoH orders and national protocols were distributed nationwide.

All components of the programme (MCH, CCUP and HPC) were designed with direct collaboration by government health institutions at rayonal and oblast level and the MOH. Overall, the R-MCH model was appropriately designed for the context. This is particularly true for the flexible approach that was taken by SDC when setting new focuses. All interviewed collaborators commended the systemic approach taken and the ability of SDC staff to listen and take into account proposals and concerns. One particularly sensitive programme was the CCUP project. Against the background of strong anti-abortion sentiments amongst few influential parliamentarians in Ukraine, not only were national

protocols drafted and approved by the MOH but also an outright ban of abortion averted on two occasions. Bans were proposed in parliament in 2012 and again in 2013. The CCUP programme and SDC were credited by several of our interviewees of having successfully increased local capacity to influence the national debate.

The approach consisting in offering technical support and equipment as an initial step on the condition of physical rehabilitation of health institutions by local counterparts was very successful. Not only did it improve the infrastructure required for better health outcomes, but it also opened doors and built trust that was used to engage the partners at local, oblast and central level in strategic discussions on comprehensive improvement of health care delivery.

Given the very successful implementation of all three projects of the programme in the targeted rayons, the decision to not scale up some of the interventions beyond the pilot oblasts during the scale-up phase remains regrettable.

By limiting the scale-up of the pilot projects to the remaining rayons of the same oblasts, the impact on the stated aim of the program 'improving mortality rates of mothers and infants nationally' was limited. Additionally, this might have contributed to an increase in disparities of health indicators between different oblasts as project oblasts and institutions were chosen based on good governance and best academic reputation, raising possible concerns about equity.

Particularly, the decision to not scale up the cost-effective and well-accepted procedure of safe abortion to the remaining of the country remains unfortunate.

However, not all of the project components were designed to achieve nationwide scale up (see effectiveness). While the stated objectives of the programme were to decrease maternal and perinatal mortality at national level, the programme design would influence rates mainly at the level of rayons and oblasts that were covered. Thus, there is a mismatch between stated objectives for change at national level and implementation and effects mainly at regional level.

Nevertheless, all projects had elements that impacted the national level through improved regulation and guidelines (e.g. orders on referral of pregnant mothers and newborns, twin deliveries) and serious efforts were made to disseminate the guidelines and lessons learned in the project oblasts throughout the country (e.g. through conferences, end of project's workshops in inviting clinicians from other oblasts, publication of reports, creation of a website containing all documents and guidelines).

B. Efficiency

Efficiency: The extent to which the project has been administered *efficiently* in terms of how well inputs and activities were converted into results (outputs). Description of the results achieved by the project, and an assessment of these results, compared to the expected results stated in the project's documents. This should include a cost-benefit analysis (to the extent possible) of the investments, and indication of any alternative approaches that could have been adopted by the project.

Efficiency and Output

The program management worked competently, carrying out activities according to plan using available resources efficiently and in close collaboration with MoH and local public authorities and institutions at oblast and rayon level. Examples for efficient working mechanism include cost-sharing with government institutions responsible for renovation of facilities receiving donated equipment and working through existing structures and capacities to raise awareness and promote health activities.

The project employed a multi-stakeholder approach by working with a variety of national and international organizations with a mandate in the same area, such as UNFPA or USAID. to advocate for change at the national level and avoid duplication at the regional level, e.g. USAID focused efforts on availability of contraception, while SDC trained staff to counsel on contraception. The inclusion of representatives from MOH and national institutions (NMAPE, universities, UNICEF, WHO) in steering committees ensured sharing of information and ownership at oblast and national level. Stakeholders unanimously acknowledged and highly commended the flexible and needs-based approach taken by SDC to address arising challenges and threats (i.e. polio outbreak, political opposition to abortion, violence, etc.) and the additional support provided during the time of the Euromaidan and conflict in Crimea and Eastern Ukraine.

Particularly impressive was also the health promotion component of the project implemented by UNICEF taking the approach to let the regions decide on their own priority for health promotion topics, which ensured ownership and that local needs were met showing appreciation of the local level´s contributions. Unlike other projects building parallel structures and supporting a donor-driven agenda, the SDC supported project strengthened already existing structures enabling them to fulfil their responsibilities within the health care system.

In terms of geographic coverage, each of the three projects of the SDC supported program worked in 4 to 5 oblasts (see Figure 5 below) in different parts of Ukraine: Safe first and second trimester pregnancy termination methods and Comprehensive Care for Unwanted Pregnancies (CCUP) are provided in 5 model clinics in the regions of Poltava, Odessa, Vinnytsia, Donetsk and Kyiv city and 4 centres for simulation-based training on perinatal care for mother and children were set up in Vinnytsia, Crimea, Volyn and Ivano-Frankivsk.

Figure 5: Geographical coverage of services

Source: Map: mapsofworld.com. Geographical location of programme activities: by evaluation team

The projects activities were designed and implemented competently, and resources used efficiently. Given the available data, particularly in relation to unit costs and relevant outcome data, a full cost-effectiveness or cost-benefit analysis is not possible and beyond the scope of this evaluation. However, three considerations in relation to cost-benefit/cost-effectiveness include the following:

1) The CCUP interventions demonstrated that safe abortion provision from inpatient to outpatient services is feasible at high quality levels. This shift leads to reduced patient and health-system-related costs. Thus, it is a cost-effective approach for service provision.

2) The decision was taken to purchase state-of-the-art equipment for training and CHF 417'390 were spent on the procurement of these clinical simulation tools.

The rationale for the decision to procure these included: reputational reasons, availability of funds, and the risk that compromises in quality of equipment may lead to rejection from Ukrainian partner side as 2nd class medicine.

This approach is however also likely to have increased inequities as other oblasts have not been benefitting as much from the modern training approaches. Simulation-based training may have potentially been implemented with less expensive, more durable equipment and with larger coverage. As with all interventions where high tech components are purchased for flagship projects, questions of equity arise when these cannot be replicated in other parts of the country. Simulation training dolls come in various forms and with various functions. Purchasing prices start at 120 CHF (Laerdal Baby Anne) for basic models, which are frequently used for neonatal resuscitation training throughout the world. To opt for more expensive equipment with multiple simulation options and including monitors that are not yet available on neonatal intensive care units is debateable.

They further raise concerns regarding the sustainability of the intervention as maintenance of the expensive equipment and procurement of spare parts is reportedly difficult by some of the interviewees. For example, during key informant interviews, it became apparent that no funding is available at this particular institution to replace a broken SimPad (= electronic control pad for a training doll) in one of the simulation centres. It might have been good to install a system to generate funds through the training courses to be able to replace or repair broken training equipment (please also refer to section on *Sustainability*).

3) Equity and scale: As the selection of the partner oblasts for project implementation was reportedly based on good governance, best academic reputation and responsiveness of local administration, health disparities between oblasts might have unintentionally been increased, as oblasts that are governed by more responsive and supportive administrations might also have better health indicators and quality of care may already have been better in the partner oblasts. Particularly, the decision to not scale up the cost-effective and well-accepted procedure of safe abortion to the rest of the country remains unfortunate. Particularly as it seems that a scale up plan had been developed and approved by an order of the MoH on 13.12.2013 №1090.

Table 1: Costs of SDC supported project components

Component	Year	Cost (CHF)
Mother and Child Health Programme I	2008-2010	3.700.000
Comprehensive Care for Unwanted Pregnancies I & II	2009-2015	1.730.000
Mother and Child Health Programme II	2011-2015	6.230.000
Health Promotion and Communication	2011-2017	2.430.000

Key informants considered the project to be implemented in a culturally-appropriate way. Although most equipment was purchased outside the country, the methods used to improve the skills and knowledge were developed by local implementing partners, who are familiar with the local situation. Comments made by key informants were supportive of the approach taken by SDC in developing the programmes such as 'systematic', 'comprehensive', 'logical', 'well-organised', 'covering the need that were there at the time'. The interventions overall were viewed most favourably by all oblasts health administrators that were met during the visits and are regarded by local governments as very effective and efficient ways of service delivery. Some voiced that it was the best and most efficient project they had worked with in the past *(see also Annex 3 – Booklet).*

C. Effectiveness

Effectiveness: The extent to which the R-MCH interventions have been effective in attaining their primary objectives: contributing to the substantial reproductive, maternal and child health outcomes improvement. The logical framework and to the strategic objectives that had been agreed for the different phases and capture unintended results (good and less good) deriving from the outputs of the projects.

Effectiveness and output

The most evident results at institutional level include capacity for implementation of the perinatal service package, safe abortion procedures and communication.

In more details:

- Results at the hospital level:

a) Perinatal care

During all visits to the departments of obstetrics and neonatology at the partner facilities, the 'mind-changing' influence that the project had on the way of practicing medicine was stressed. Most frequently mentioned changes included the significant reduction of drugs prescribed with better patient outcome, the attendance of a partner during delivery and improved access of the family to mother and newborn after delivery, the improved bonding between mother/father and newborn during the hospital stay, the improved communication within and working together as a team, improved guidelines on important and common problems faced by the perinatal team, the improved infrastructure and equipment. 'Classical medicine was replaced by modern medicine' as one key informant put it.

b) Comprehensive Care of Unwanted Pregnancies (CCUP)

Model clinics were established including the renovation of the infrastructure, provision of necessary tools and equipment and training of medical staff in safe abortion techniques. Further, counselling of women before and after abortion was implemented with educational material developed to inform women about sexual health, contraception and abortion options. All these clinics are still operational providing comprehensive care to women in the respective oblasts and have been used previously to train practitioners from surrounding rayons in safe abortion care. According to our interviewees, care had dramatically improved leading to fewer complications from abortion and more client- friendly, less stigmatising care. Key informants asserted that the imminent ban of abortion was averted owing to the capacity that had been built by the CCUP project.

- Results at the pre-service level:

Medical universities and post-graduate training institutes: In addition to changing practice at the hospital level, numerous efforts were undertaken to include simulation-based training and concepts such as evidence-based medicine into the curricula of some of the medical universities and post-graduate training institutes of Ukraine. This will lay the groundwork for providing good quality pre-service education to students and young medical doctors and increasing the number of health care providers familiar with evidence based medicine and

simulation-based learning and teaching. Other medical universities in Ukraine have taken up the concept of simulation-based teaching and opened their own simulation centres for pre-service training (e.g. Odessa University built a simulation centre at a cost of 250 000 USD for pre-service training of medical students).

One senior lecturer and oblast health official stated how she had to completely change her training approach to students being convinced of the new approach after participating in courses held by the project.

- Results at primary care level – family doctors:

Health management courses and communication training for family doctors and paediatric primary care providers reportedly improved quality of services dramatically. Increased capacity and improved services were reported particularly in relation to counselling for vaccination against common childhood diseases. Family doctors stated that after training they were able to improve vaccination rates of children in their catchment area. One family doctor mentioned that when she started work just after obtaining her medical degree she copied the practice of her colleagues and did not vaccinate children against Hepatitis B. With her improved knowledge of vaccinations gained by participating in training courses sponsored by SDC, she is now much better equipped to convince sceptical parents about the importance of vaccination. She employs creative ways of increasing vaccination rates in her rayon. Amongst other things, she posted pictures of teachers, who support vaccinations in her clinic amongst others. She also added that participating in the courses increased her professional standing amongst colleagues and was helpful in getting promoted to the rayonal health administration.

- Results at beneficiary level: Pregnant women, their partners and newborns

Most important results at the beneficiary level include the family-centred approach to delivery care, improved access to and quality of perinatal and safe abortion care.

The main benefits are for pregnant women, who have increased access to care during pregnancy including the option to safely terminate the pregnancy during the first weeks.

Pregnant women from 71 rayons benefit from family-friendly care during and after delivery. New equipment and renovated facilities further motivate hospital staff and enable improved clinical care. Babies directly benefit from closer contact to their mothers and fathers, increased rates of vaccination and breastfeeding, decreased polypharmacy and improved care and the improved physical environment and equipment.

In terms of behaviour change of the population, results from a KAP study are awaited that need to be compared with the KAP study results at baseline.

As may be expected of such a comprehensive project operating in a very challenging environment, not all interventions could be fully implemented. Despite significant improvements and special attention given to this issue by the project, access was still somewhat limited for mothers and families to their newborns on neonatal intensive-care-units (NICUs) in the visited sites, Kangaroo Mother Care (KMC) was not routinely implemented and some equipment had broken down with difficulties to organize repairs. The software for inventory and maintenance of medical equipment, 'openMedis', introduced by the program was no longer used in the visited sites, the use of the application introduced for e-learning could not be ascertained and the iPath telemedicine server was no longer operational. However, important information including projects' documents, clinical guidelines and all national protocols developed with the support of the program can still be

found and downloaded for free from the MCH project website (www.motherandchild.org.ua).

Effectiveness and outcome

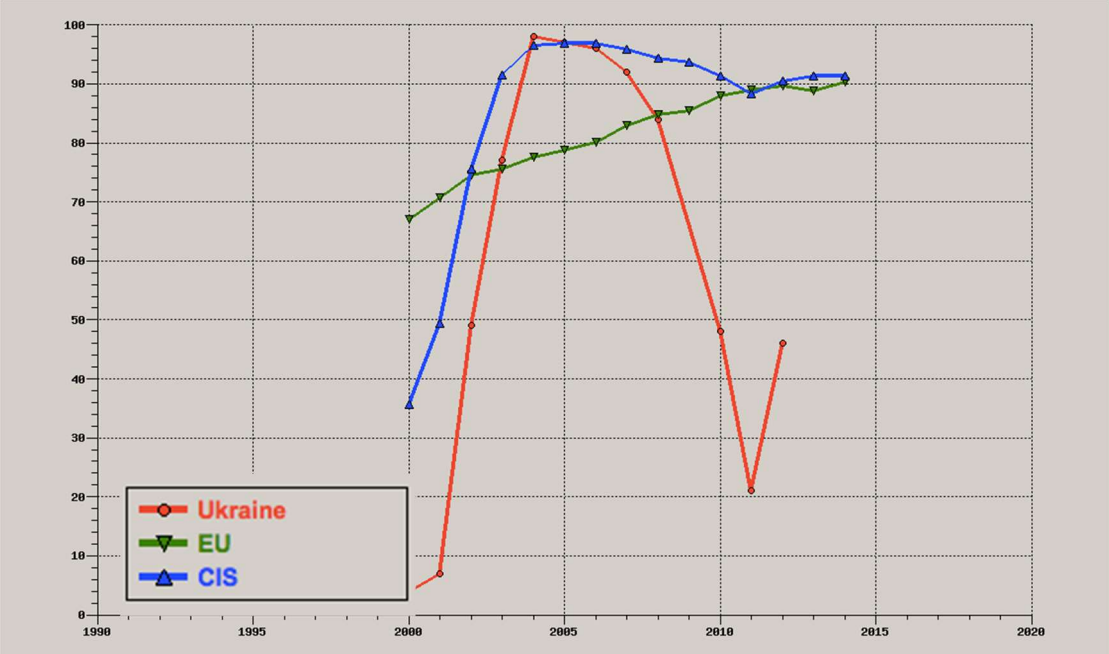
Swiss support has contributed to the steady improvement of the quality of perinatal services and more generally of maternal and child health care services.

Spontaneous vaginal deliveries increased from 65% to 71% and partner deliveries from 67% to 87% reaching average international levels.

While the improvement of vaccination rates overall was not at the core of the program, perinatal care includes vaccination against Hep B during the first day of life as well as the provision of BCG vaccine. In addition, the health promotion and communication component decided to leave the decision about the topic for improved communication to the discretion of the partner oblasts and rayons. 2 of 4 oblasts chose training on vaccination communication as their most important priority. Key informants report continued reluctance of vaccinating newborn babies and children overall according to the National Immunization Schedule, both from parents as well as from health providers/ doctors side. Reasons given include mainly distrust in quality of vaccines and vaccines manufactures from countries such as India and South Korea. Other informants mentioned significant barriers to improved vaccination coverage including stock-outs at hospitals and clinics, co-payments and significant bureaucratic hurdles.

While vaccination rates were historically very high in Ukraine, they deteriorated around 2008 reportedly due to vaccine shortage and mainly due to mistrust of providers and parents in the quality of available vaccines. Improved counselling skills and evidence-based information on vaccination and through communication campaigns implemented by UNICEF has led to increased vaccination rates in selected oblasts. While improved, coverage has not yet reached pre-2008 levels (see Figure 6).

Figure 6: % of infants vaccinated against hepatitis B

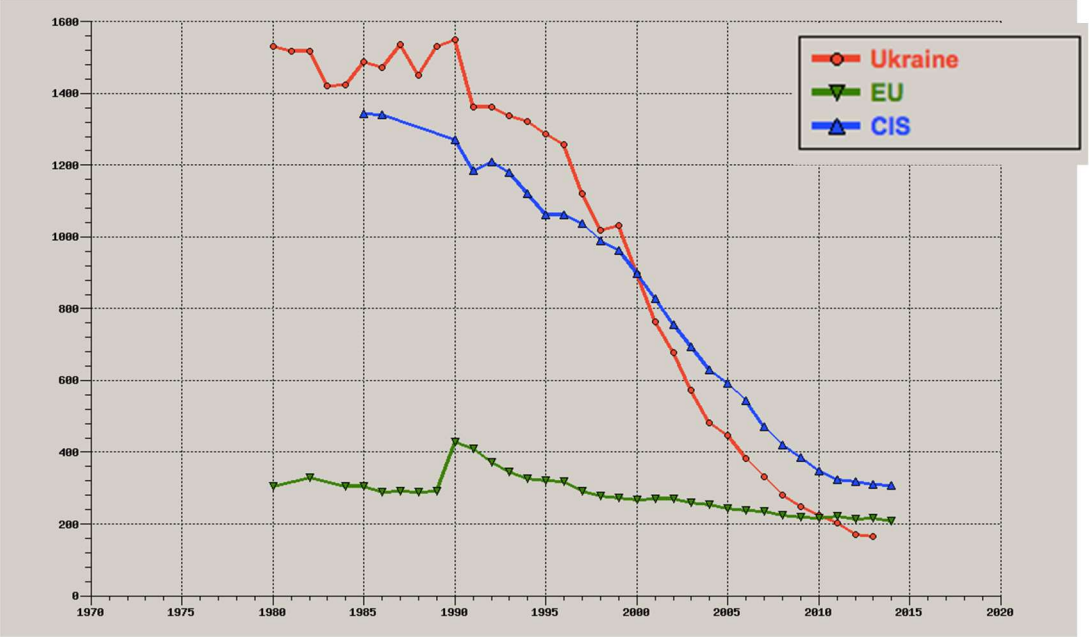


Source: WHO/Europe, European HFA Database, July 2016, accessed 05.October 2017 at http://data.euro.who.int/hfadb/

As a result of the programme, the percentage of use of safe abortion methods increased in partner oblasts from 28% in 2010 to 90% in 2015. Reported abortion rates decreased during the project period at national level from 1121/1000 live births in 1997 to 166/1000 live births in 2013 (see Figure 7; latest data available).[14] While decreasing abortion rates was not an explicit objective of the project, overall abortion rates have decreased considerably to levels below CIS and European averages. The reasons for this may include: improved counselling with the contribution of the SDC project and the increased access to contraception through a parallel project on MCH implemented by USAID and UNFPA. However, it is also very likely that considerable underreporting is taking place, as many abortions are reportedly being carried out in the private sector, which does not report to MOH. Further, even government facilities do not report medical abortions and according to key informants, the numbers reported are far below estimated numbers based on consumption of respective medication.

However, it is plausible that the proportion of safe abortions to total number of abortions has increased in the pilot oblasts and corresponding rayons after training of providers and provision of the required equipment as reported in the reports and surveys as well as by the key informants of this evaluation. The impact in national level data however is likely to fall short of its potential as trainings and provision of equipment has not taken place in the other 20 oblasts.

Figure 7: Abortions per 1000 live births



Source: WHO/Europe, European HFA Database, July 2016, accessed 05.October 2017 at http://data.euro.who.int/hfadb/

Despite being carefully outlined in the logframe and monitoring plan, overall relatively little outcome and impact data was available to the evaluation team at the time of report writing, therefore mainly WHO estimates were used. Estimates as such are not the best possible

[14] Source: WHO/Europe, European HFA Database, July 2016, accessed 05.October 2017 at http://data.euro.who.int/hfadb/

measures for project monitoring and/or outcome/impact analysis (*see also section on Impact).*

D. Impact

Impact: The extent to which R-MCH interventions have had an impact on the target groups. Assessment of the project's contribution to the overall objectives. According to the information gathered, the plausibility of the achievement of the overall objectives should be assessed. Also capture indirect positive and/or negative impacts (environmental, social, cultural, gender, etc.).

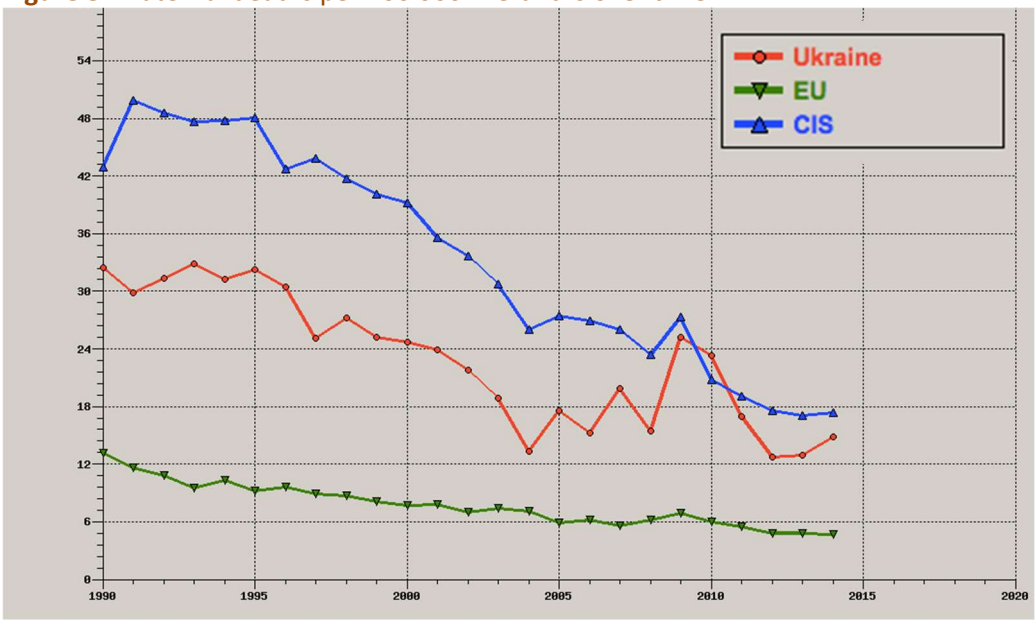
Impact

Reported maternal and infant mortality rates decreased during the project period at national level from 25.8 maternal death/100 000 live births in 1997 to 14.8 in 2014 (latest data available, WHO estimates) and infant death from 14.2/1000 live births to 7.9 respectively, see Figure 8 and 9.

According to the program/MoH data, maternity mortality ratio due to unsafe abortion decreased from 9.9% in 2010 to 3% in 2014 in pilot oblasts. Data for 2015-2017 was not available.

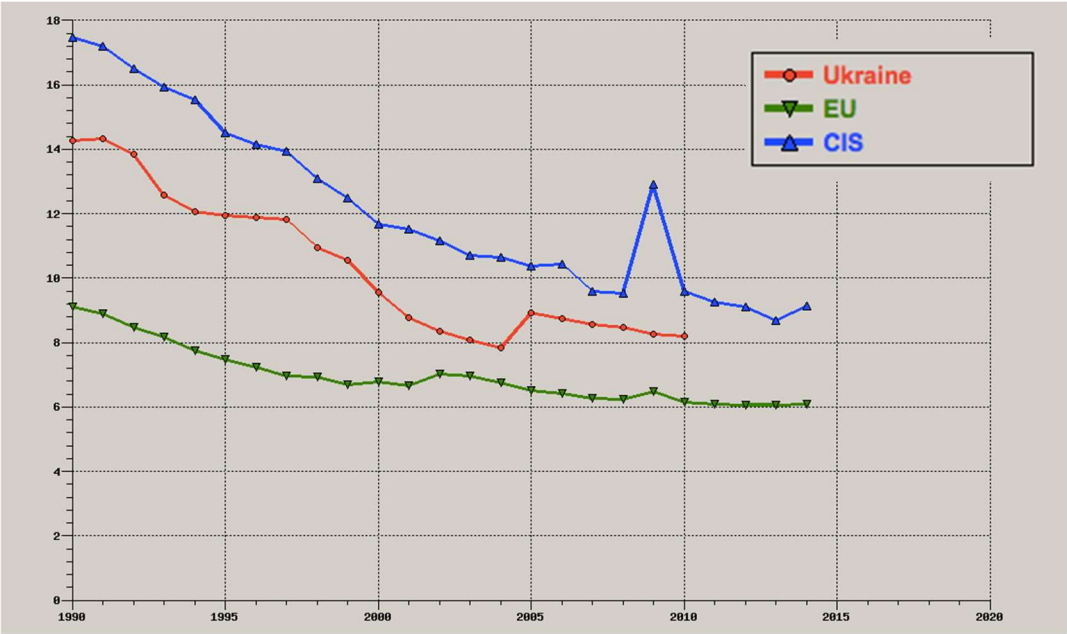
Albeit difficult to quantify, the contribution of SDC´s projects to these considerably improved indicators for maternal and infant health is very plausible.

Figure 8: Maternal deaths per 100 000 live births over time



Source: WHO/Europe, European HFA Database, July 2016, accessed 05.October 2017 at http://data.euro.who.int/hfadb/

Figure 9: Perinatal deaths per 1000 births over time



Source: WHO/Europe, European HFA Database, July 2016, accessed 05.October 2017 at http://data.euro.who.int/hfadb/

E. Sustainability

Sustainability: Draw conclusions on the sustainability of the R-MCH interventions. The level of integration of these interventions into the country's health system from the perspective of sustainability beyond the projects' support.

Sustainability

A key focus of the projects throughout the planning and implementation phases was the sustainability of all components. This was well achieved particularly for interventions related to capacity building, transfer of knowledge and clinical skills, as well as changing the mind-set of clinicians and administrators to work more patient-centred and evidence-based.

At national level, orders and protocols were developed and adopted by the MOH and training courses integrated in the curricula of some universities and post-graduate training institutions to ensure sustainability. Given the frequent changes of leadership and personnel at the MoH (the current Minister is the 25th Minister of health in the last 26 years since independence), as well as oblast health authorities, ownership and continuation of projects' activities at the administrative level including trainings, implementation of approved standards and their inclusion in clinic accreditation requirements, seem at present not guaranteed without continued external support and follow up.

The purchase of high-tech equipment for clinical simulation trainings raises some concerns regarding the sustainability of the intervention as maintenance of equipment and procurement of spare parts is reported as challenging. For example, during key informant interviews it became apparent – while the equipment is still being used and well-maintained three years after its purchase – that no funding seems to be available to replace more

expensive items that are broken. It further raises issues of equity as many other training institutions could not benefit from this intervention due to the high cost to purchase equipment. A model where less expensive equipment would be used in more training institutions might have been warranted however there are arguments for both approaches. In view of desired sustainability, an income-generating model might have been considered in order to raise funds for replacing broken spare parts.

The sustained implementation of Information and Communication Technologies (ICT) including telemedicine and tele-teaching, could not be confirmed at the visited sites. According to project reports, IPath telemedicine platform had more than 1000 registered users and over 1200 cases had been discussed on the platform since 2004. Unfortunately, the iPath can no longer be accessed. While openMedis (the registration and maintenance software for medical equipment in hospitals that was introduced by the project) is still online, it was no longer in use in the visited project sites. It could be re-introduced nationally only, if there is a genuine demand and support from the MoH (e.g. as part of Ukranian eHealth).

The strengthening of continuous medical education and the integration of training approaches into pre-service training sustainably enhanced the health system.

The Regional Health Care Management Summer School in Ukraine, inspired by the Swiss Lugano Summer School, created an educational platform for know-how exchange and dialogue among health professionals, and especially health care managers, to foster health care system changes. Having a comprehensive long-term vision, this initiative pulled in relevant stakeholders, such as the MoH, the World Bank, and UN organizations, such as UNICEF. Based on the Summer School experience, a Winter School session was supported and organized by UNICEF in January 2016 and 2017. According to key informant, this platform is particularly important for generating new ideas and concepts in view of improving the health care system within the on-going reforms.

4. Recommendations for Strategic Orientation

SDC supported interventions – introducing evidenced-based medical knowledge, skills and technologies into health care settings in close collaboration with MoH and local partners, supported through trainings and communication campaigns, achieving sustainability through the development of guidelines and MoH orders and their integration of into pre-service and post-graduate education – remain relevant today, as they were in 2008. Whilst the SDC funded programs had impressive successes in improving perinatal health, abortion care and communication and health promotion in some areas of Ukraine, there is still significant room for improvement in other parts or sectors of the health care system.

To quote the current Minister of health in Ukraine, "*the country's health care system is in a poor condition because nobody did anything to improve it before or after independence*." Therefore it is suggested that:

- ❖ SDC should build on momentum gained

1. While access to quality perinatal and safe abortion care has significantly improved in the public institutions during the period of the program, long-term success is not guaranteed and a reversal of gains is foreseeable without on-going monitoring and support. Key informants reported that unofficial and non-transparent co-payments remain a

persisting issue. While this concern is beyond the immediate scope of the program, it limits the access to health care for women and families, who are asked to pay out-of-pocket for services, essential drugs and consumables, such as access to the family rooms, milk pumps, non-reusable spare parts, antibiotics, etc. With considerable investments made, a high regard amongst partner organisations and national health administration and a good reputation of the program, SDC should leverage its influential position to remind the MoH to honour commitments made, level up expenditure for health as % of public expenditure and GDP to meet European averages (see Figure 10 and 11) and ensure sustainability of the achievements made.

❖ SDC should influence the on-going health system reform

2. SDC is well-positioned to influence the on-going health system reform and urge the MoH to:
   - Set up and ensure consistent use of quality improvement mechanisms to improve health care services
   - Ensure adequate maintenance and repair of (sophisticated) equipment
   - Ensure improved monitoring and data collection and its use for planning of health services
   - Address the increasing role of private sector (currently largely non-regulated) and for-profit medicine in government facilities in forms of non-transparent co-payments for basic medical services.

❖ SDC should - while moving to new priorities - keep an eye on the unfinished agenda

Even in the program oblasts, some essential health interventions (preventive and curative) are not fully implemented. It can be safely assumed that this holds true also for the rest of the country and therefore scale-up of services to national coverage would be desirable (e.g. family deliveries, kangaroo mother care, promotion of breastfeeding and vaccination in primary health care settings, safe abortion practice, skills based training of health workers in newborn- and maternal care).

3. Scale up: Consider increasing the reach of the project by encouraging simulation centres to run trainings for health staff from other oblasts (currently centres are utilized only some days/weak for staff from the same oblast).
4. Strengthen efforts for vaccination to meet European standards: While health promotion communication activities improved vaccination rates, they are still the lowest in Europe and require on-going attention for the country to benefit from this most effective public health intervention, vaccination against HPV is currently not systematically available in the country and would constitute a clear overlap to the NCD agenda as it prevents cervical cancer (in a country where screening through PAP test[15] for early detection is not available). However, before introducing new vaccines as part of the government health care services, improved uptake of the existing vaccine schedule needs to be ensured by reducing barriers to universal coverage.

[15] Papanicolaou (PAP) test is a method of cervical screening used to detect potentially pre-cancerous and cancerous processes in the cervix.

5. Strengthen efforts for promotion of breastfeeding: In addition to psychological and infection prevention effects (breast milk as 'the first vaccine for the baby') breastfeeding reduces rates of breast- and ovarian cancer. It further increases post-delivery weight loss of mothers, decreases the risk of developing type-2 diabetes, rheumatoid arthritis, and cardiovascular disease, including high blood pressure and high cholesterol[16]. It is also shown to reduce rates of obesity in childhood and adolescence, inflammatory bowel disease (Morbus Crohn, celiac disease), leukaemia (AML and ALL), diabetes mellitus type I and II, while significantly improving cognition and learning/school outcomes.[17] The overlap with the NCD prevention is self-evident and constitutes an excellent opportunity to keep a finger on the pulse of perinatal care while moving the NCD agenda.
6. Improving adolescent health is key to achieving NCD targets and SDC´s experience on improving adolescent health in the region should be capitalized upon, as should the capacity, built within the framework of the health promotion communication component.

❖ SDC should implement lessons learned

7. While designing and implementing the NCD project, scale up should be planned for from the outset and equity considerations kept in mind. Should SDC select only oblasts for project implementation with more efficient administrations, health disparities between different oblasts might unintentionally be increased, as oblasts that are governed by more responsive and supportive administrations might also have better health indicators. If the project cannot cover the whole country, as it is very large, provisions should be made how to ensure equitable provision of services to the entire population, by for example working with the Ministry of Health and/or other donors covering the remaining part of the country.

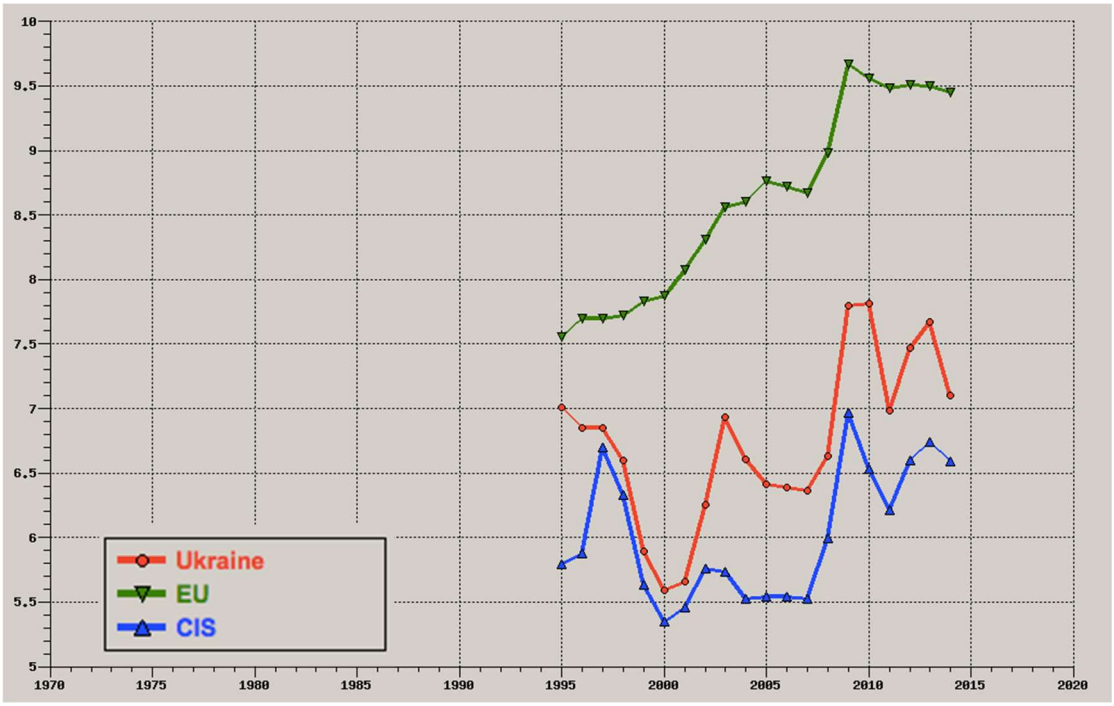
   A systematic logic model of objectives, input, output, outcome, impact and sustainability should be employed: health indicators should be chosen that realistically can be expected to be influenced by the intervention. If the project is mainly limited to selected oblasts, then the monitored indicators should reflect the regional limitation.
8. Evidence of successful interventions to improve health worker performance should also be kept in mind, e.g. evidence shows that printing and distribution of guidelines alone does not yield effects on improving health worker performance (see Figure 11)[18].

[16] Chowdhury R Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. Acta Paediatr. 2015 Dec;104(467):96-113. doi: 10.1111/apa.13102.)

[17] Amitay EL et al., Breastfeeding and Childhood Leukaemia Incidence: A Meta-analysis and Systematic Review JAMA Pediatr. 2015 Jun;169(6):e151025.

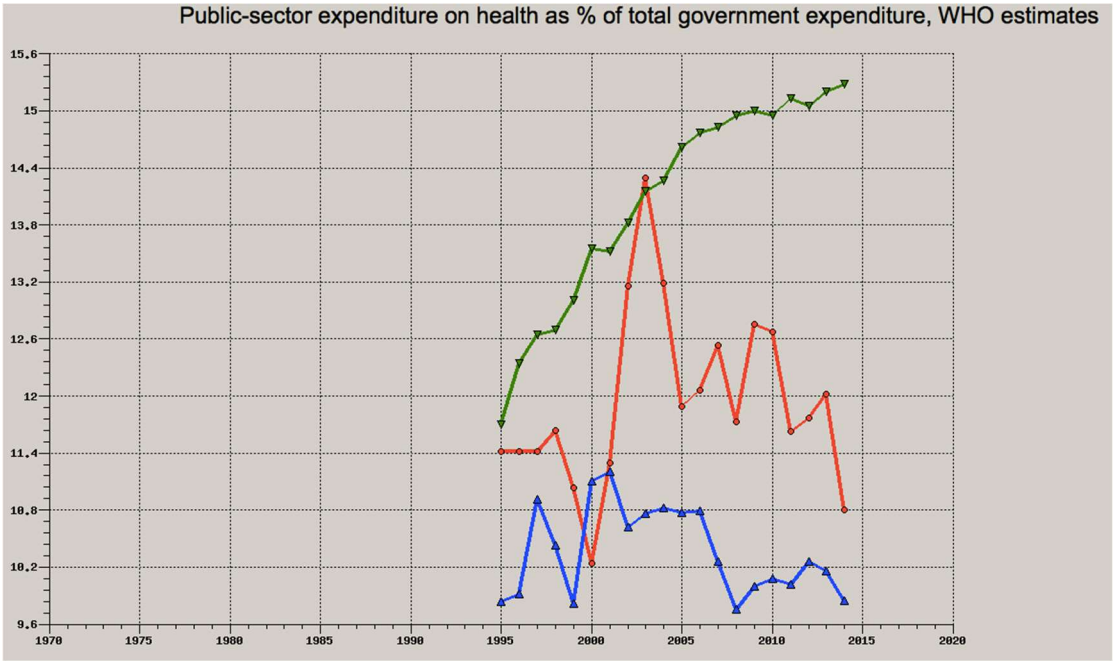
[18] Rowe AK, Rowe SY, Peters DH, Holloway KA, Chalker J, Ross-Degnan D. The Health Care Provider Performance Review: a systematic review of the effectiveness of strategies to improve health care provider performance in low- and middle-income countries

Figure 10: Total health expenditure as % of GDP, WHO estimates



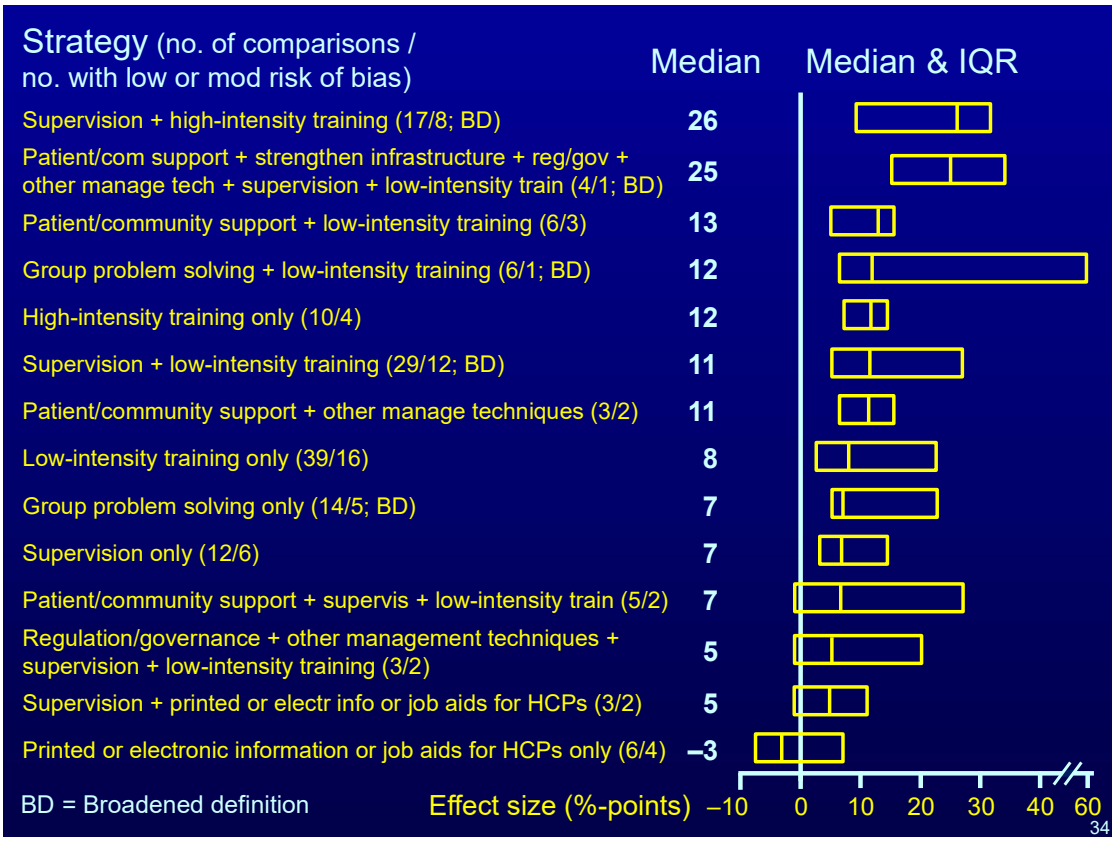
Source: WHO/Europe, European HFA Database, July 2016, accessed 27.November 2017 at http://data.euro.who.int/hfadb/

Figure 11: Public-sector expenditure on health as % of total government expenditure, WHO estimates



A systematic review carried out by Rowe at al. reviewed effects of several interventions or combination of interventions on health worker performance. The effect sizes of the different interventions are shown in Figure 12. The distribution of printed or electronic guidelines and materials or job aids alone did not yield any effect on health care worker performance.

Figure 12: Effect of intervention on health workers performance



Source: Alexander Rowe, CDC, Presentation at Quality of Care framework meeting 30 September- 1 October 2015, WHO Regional Office for Europe, Copenhagen, Denmark

5. Conclusion

SDC long-term support led to substantial improvements in perinatal care, safe abortion care and health promotion with significantly improved health outcomes for mothers and newborns, as reflected in improved maternal and infant health indicators in Ukraine.

The efficiently implemented project was and remains relevant for the country´s context, was aligned with national and international goals and is highly regarded by all stakeholders.

Given the considerable investments made, the high regard amongst partner organisations and national health administration and a good reputation of the project, SDC should leverage its influential position to remind the Ministry of Health to meet commitments made, level up expenditure for health as % of GDP to meet European averages and ensure sustainability of the achievements in perinatal health. SDC may also consider directing part of its continued support in Ukraine towards maintaining achievements of the R-MCH program given its prime position in doing so.

Annex 1 – Reviewed background documents

1 Ukrainian Mother and Child Health Programme, 1997-2017, Swiss Centre for International Health

- Phase I, 2008 – 2010 Project Document
- 1st semester 2008 overview report
- 2nd semester 2008 overview report
- 1st semester 2009 overview report
- Report on Results of Mid-term Review of Ukraine-Swiss Mother and Child Health Programme Implementation during 1,5 year (January 2008 – May 2009)
- 2nd semester 2009 overview report
- 1st semester 2010 overview report
- External Review of Mother and Child Health Program in Ukraine, 2010 by Curatio
- Intermediate Operational Report 01.05.2011 to 31.10.2011, incl. MCHP Main Indicator Monitoring Plan, April 2011
- End of phase report, 2011
- Phase II 2011 - 2015 Project Document
- Annual Progress Report 01.05.2011 to 31.04.2012
- Final Operational Report Entire Project Phase 01.05.2011 to 30.04.2015
- Final Operational Report, Entire Project Phase, 01.05.2011 to 31.12.2015, (including the non - cost extension period)
- Operational Report, First semester, second project year 01.05. - 31.10.2012
- MCHP Hand-Over Strategy, 2013
- Mid Term Review Report, 2013
- Management Response to Internal Mid-Term Review Phase II (May 2011- April 2013)
- MCHP Indicator Monitoring Plan, update for the Annual Report for Project Year 2, 2013
- Annual Progress Report Second Project Year 01.05.2012 to 30.04.2013
- Operational Report First Semester, Third Project Year 01.05.2013 to 31.10.2013
- Operational Report First Semester, Fourth Project Year 01.05.2014 to 31.10.2014

2 Comprehensive Care for unwanted pregnancies; 2009-2014, WHO, NGO “Women's Health & Family Planning"

- Project Document 2009 – 2011
- 1st semester overview report, Reporting Period: 1/08/09 – 31/01/10
- Annual operational report, Reporting Period: 1/08/09 – 31/07/10
- 3rd semester overview report, Reporting Period: 1/08/10 – 31/12/10
- Final Report, Phase 1, August 2009 – October 2011
- Midterm Report, Phase 2, November 2, 2011 – April 30, 2012
- Annual Progress Report, Phase 2, November 4, 2011 – October 31, 2012
- 2013 Memo Internal Risk assessment
- Mid-term Report, Phase 2 November 4, 2012 – April 30, 2013
- Annual Report, Phase 2, November 1, 2012 – October 30, 2013

- Final Report, Phase 2, November 2011 – February, 2015
- Project Phase 2 Logical framework, Final Report November 4, 2012 – February 28, 2015
- External Evaluation Report 2009-2014; External evaluation of the Comprehensive Care for Unwanted Pregnancies project in Ukraine performed by WHO consultant Dr. Tamar Tsereteli in period from June 29 – July 05, 2014.
- Management Response of the Swiss Agency for Development and Cooperation (SDC) to the External Evaluation Report on the SDC funded project, Phase 1&2 (2009-2014)
- Action Plan for implementation of the Comprehensive Care for Unwanted Pregnancy Project on the national level (as of February 2015)
- MINISTRY OF HEALTH OF UKRAINE ORDER, 13.12.2013, Kyiv N 1090 On approval of the Action Plan for implementation of the Comprehensive Care for Unwanted Pregnancy Project at the national level

3 Health Promotion and Communication in R-MCH; 2011-2017; UNICEF

- UNICEF-SDC Project Proposal, December 2011
- MID-YEAR PROGRESS REPORT (Operational Report for the period 08.12.2011-31.05.2012)
- ANNUAL REPORT (Project Inception Phase for the period 08.12.2011-31.12.2012)
- MID-YEAR PROGRESS REPORT (Operational Report for the period of 1 January -30 June 2013)
- ANNUAL PROGRESS REPORT (For the period of 1 January - 31 December 2013)
- MID-YEAR PROGRESS REPORT (Operational Report for the period of 1 January -30 June 2014)
- “Promotion and Reproductive, Maternal and Child Health” within R-MCH Theory of Change (Programme Mid-Term Review), 2014
- ANNUAL PROGRESS REPORT (For the period of 1 January - 31 December 2014)
- ANNUAL PROGRESS REPORT (For the period of 1 January - 31 December 2015)
- ANNUAL PROGRESS REPORT (For the period of 1 January - 31 December 2016)
- http://motherandchild.org.ua/
- www.reprohealth.info

Lekhan VN, Rudiy VM, Shevchenko MV, Nitzan Kaluski D, Richardson E. Health Systems in Transition Vol. 17 No. 2 2015, Ukraine Health system review, 2015; 17(2):1-153

Annex 2 –Mission Agenda

Mission Program R-MCH Programme impact evaluation
Date: 17-26.09.2017
Place: Ukraine (Kyiv, Odesa, Vinnytsia, Ivano-Frankivsk)

Programme:

Date/Time	Event	Responsible / Participants	Contact Details, Location
Sunday, September 17, 2017			
13h15	Arrival in Kyiv and transfer to hotel	Susanne Carai Andreas Hansmann	
Monday, September 18, 2017			
10h00- 12h00	Briefing at the Swiss Cooperation Office Signing of contracts, Discuss aim of the mission, clarify objectives of evaluation, etc	Susanne Carai, Andreas Hansmann, Olena Kostiuk Nicolas Guigas, Petro Ilkiv	SCO
13h00-14h00	Meeting with NMAPE	Nina Goida	SCO
14h30-15h30	Meeting with UNICEF	Kateryna Bulavinova	SCO
16:00 – 23:38	Travel to Odesa by train	Susanne Carai, Andreas Hansmann, Olena Kostiuk	
Tuesday, September 19, 2017 ODESA			
10.00- 10.15.	Odesa Regional Consultative Clinic CCUP: Regional Center for Family Planning	Susanne Carai, Andreas Hansmann, Olena Kostiuk with, Dr Svitlana Posohohova - vice head in Perinatal Center Lydia Picuza - gynecologist Lidiya Gumenyuk. - head of outpatient department (gynecologist).	Odesa Regional Consultative Clinic Zabolotnogo Acad. srt 26 a Posohova S 0677481248 Oblast hospital
10.15-10.30	Observing of the model clinic.	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Dr Pikuz L.V.	Odesa Regional Consultative Clinic
10.30-10.45	Discussion	Susanne Carai, Andreas Hansmann, Olena Kostiuk and key person of local CCUP	
10.50-11.20	Observing of the model clinic in the gynaecological department of the ORCH	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Deputy Chief of Obstetrics and Gynecology Posokhova SP, Head of the Family Planning Center Gumenyuk L.Y.	Odesa Regional Clinical Hospital (ORCH)
11.20-12.00	Discussion	Susanne Carai, Andreas Hansmann, Olena Kostiuk and key persons of local CCUP	
12.00-13.00	Lunch		
13h00-14h30	HPC UNICEF review Rieznik City medical diagnostic center	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Galych SR, Luniova T	Dvoryanska str. 10 Galych 067-484-31-49 Luniova 067-271-82-73

Date/Time	Event	Responsible / Participants	Contact Details, Location
14h30-15h00	Transfer	Susanne Carai, Andreas Hansmann, Olena Kostiuk	Taxi
15:00-17.00	Nerubaisre outpatient clinic of general practice of family medicine	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Baltyan TO - deputy chief doctor of Bilyaivsky district,	tel. 097-956-40-31, Nerubayske, Partisan square 1.
17:00 – 01:17	Travel to Vinnytsia	Susanne Carai, Andreas Hansmann, Olena Kostiuk	84 night train, 3 tickets purchased
Wednesday, September 20, 2017 VINNYTSIA			
09.30-10.30	MCHP and CCUP review: M. Pirogov Hospital: NICU, X-ray department, communication with doctors (optional)	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Dr Kukuruza I., Dr Bondarenko T., Dr Oshovska T.	Pyrogova str 46 Bondarenko T 0687988404
10.30-11.00 -	Regional simulation training center; observing of equipment. Achievements and perspectives (communication with trainers - optional)	Susanne Carai, Andreas Hansmann, Olena Kostiuk with I.Kukuruza, T. Bondarenko , T.Oshovska	Pyrogova str 46
11.30-12.30	Vinnytsia Central Clinical Hospital: Model Clinic for the 1st trimester (CCUP)	Susanne Carai, Andreas Hansmann, Olena Kostiuk with I.Kukuruza, T. Bondarenko , T.Oshovska	
12.30-13.30	Lunch		
14.00- 16.00	Visit to Central Hospital in Kalynivka (delivery department)	Susanne Carai, Andreas Hansmann, Olena Kostiuk with T.Bondarenko	Pyrogova str 46 Bondarenko T 0687988404
16h00-16h30	CCUP and MCHP discussion	Susanne Carai, Andreas Hansmann, Olena Kostiuk and key persons of local CCUP and MCHP	
17h00-22h00	Transfer to IV-FR.I	Susanne Carai, Andreas Hansmann, Olena Kostiuk	
Thursday, September 21, 2017 IVANO-FRANKIVSK			
09h00-10h00	MCHP review the regional perinatal center: round in NICU, interviews with medical doctors.	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Yarema MI, Tsihon ZO	Chornovola str 47 Tsihon Z 0505138452 Yarema M 0982109410
10.00-11.00	Regional training simulation center (will be time of classes)	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Yarema MI, Tsihon ZO	
11.30-13.30	Visit to the Central Hospital of Kalush (delivery department): review of equipment, discussion	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Yarema MI, Tsihon ZO	
13h30-14h30	Lunch		
14h30-17h00	Visit to the Central Hospital of Tlumach (delivery department): review of equipment, discussion	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Yarema MI, Tsihon ZO	

Date/Time	Event	Responsible / Participants	Contact Details, Location
17h00-18h00	Transfer to IV-FR.		
18:00 – 19:00	HPC and MCHP discussion	Susanne Carai, Andreas Hansmann, Olena Kostiuk with Yarema MI, Tsihon ZO	
20h30	Transfer to train station		
21:50 – 08:51	Return to Kyiv	Susanne Carai, Andreas Hansmann, Olena Kostiuk	043 night train, 3 tickets purchased
Friday, September 22, 2017			
09:00 – 09:30	Transfer to the hotel	Susanne Carai, Andreas Hansmann	Radisson Blue Hotel Yaroslaviv Val 22
11h00-12h00	Meeting with USAID	Tatiana Rastrygina	Location tbc. *USAID Ukraine* *4, Igor Sikorsky Street* *Kyiv 04112 Ukraine* *Tel: (+380 44) 5215162* *Mob: (+380 50) 443-8190*
12h00-13h00	Lunch		
14h00-15h00	Meeting with WHO	Anastasia Dumcheva	SCO 0952802851
15h30-16h30	Meeting with Child Well Being Fund	Tetiana Basiuk, Natalia Zymivets	SCO 0504481344
	Meetings with leading national R-MCH experts.		
Saturday, September 23, 2017			
Sunday, September 24, 2017			
	Review of findings, preparation for debriefing with SDC.		
Monday, September 25, 2017			
10h00-12h00	De-briefing at the SCO Preliminary mission findings, conclusions and recommendations	Erika Placella (via Lync), Holger Tausch (tbc.), Nicolas Guigas, Petro Ilkiv	SCO
	Lunch		
14h00-15h00	Meeting with the WB	Olena Doroshenko Natalia Riabtseva,	WB
15h30-16h30	Meeting with WHFP	Galyna Maistruk	SCO/WHFP office 0504105880
Tuesday, September 26, 2017			
10:30 - 16:00	Check-out and travel to Germany	flight LH1491 to Frankfurt	

Annex 3 – Booklet

Separate PDF document