

**The program of the five-year plan
to gradually increase state funding to meet the needs
of 50% of women from high medical and social risks groups
for maternal mortality
by 2023**

Bishkek - 2019

Members of the working group:

1. Raisa Asylbasheva - Chief Specialist of the Department for Organization of Treatment and Prevention Care and Medicine Policy, MoH KR
2. Larisa Murzakarimova - Director of the e-Health Center, MoH KR
3. Adil Ermanbetov - Technical Consultant for Maternal and Child Health Programs, MoH KR
4. Elmira Maksutova - Head of the Family Planning Center «Marriage and Family”, NM&CPC
5. Inna Bolotskikh - Assistant of the Department of Family Medicine of the Kyrgyz State Medical Institute for Postgraduate Education named after S. B. Daniyarov
6. Cholpon Mambetaipova - Head of the Department for International Cooperation of the Ministry of Labor and Social Development of KR.
7. Bakytbek Satybekov - Chairman of the Public Council, Ministry of Finance of KR.

Address for correspondence with the working group: 1, Togolok Moldo St., Bishkek, Kyrgyz Republic, 720040, Tel: 66-27-98, 62-18-29

Sincere appreciation to the United Nations Population Fund (UNFPA) in KR and the Kyrgyz Family Planning Alliance for the technical and methodological assistance provided in the development of this document.

Content

List of Abbreviations	5
Glossary of Terms	6
INTRODUCTION.....	9
1. ANALYSIS OF THE CURRENT SITUATION IN THE REPRODUCTIVE HEALTH PROTECTION AND FP AMONG POPULATION OF THE KYRGYZ REPUBLIC.....	11
1.1. Regulatory framework for reproductive health, FP and social services	11
1.2. Reproductive Health Protection Statistics	1312
1.3. Medical and social risk group	16
1.4. Human resources in the field of RH protection	17
1.5. Analysis of the pharmaceutical market and humanitarian supplies	18
1.6. Accounting and reporting contraceptives	19
2. TYPES OF CONTRACEPTIVES PLANNED FOR PUBLIC PROCUREMENT	25
3. CALCULATION AND PROJECTION OF CONTRACEPTIVES REQUIREMENTS FOR WRA FROM THE MEDICAL AND SOCIAL RISK GROUPS	27
3.1. Calculation of the contraceptive products requirements of WRA from the medical and social risk groups	27
3.2. Contraceptives requirement projection for 2019-2023	29
3.3. Calculation of the average cost of each type of contraceptives in KR market in KR soms and US dollars	29
3.4. Projection of contraceptives procurement requirement	30
3.5. Comparison of the procurements projection in KR market and procurements from UNFPA Catalog	31
3.6. A contraceptive procurement plan, with a gradual increase in state funding to meet the needs of 50% of women from high medical and social risk groups for maternal mortality between 2018 and 2023	33
3.7. Contraceptive procurement mechanisms	36
4. STORAGE, DISTRIBUTION AND USE OF CONTRACEPTIVES ON THE BASIS OF MLIS, CHANNEL	43
4.1. Contraceptives storage and warehousing rules	43
4.2. Contraceptives distribution and usage based on MLIS, CHANNEL	51
5. MONITORING AND EVALUATION	51
CONCLUSIONS AND RECOMMENDATIONS	55
ANNEXES	56

List of abbreviations

CIC	Combined Injection Contraceptives
COC	Combined Oral Contraceptives
CP	Clinical Protocol
DB	Database
DHS	Demographic and Health Surveys
DDS&MD	Department of Drug Supply and Medical Devices
EML	Essential Medicines List
FMP	Family Medicine Practice
FMC	Family Medicine Center
FP	Family Planning
GPC	General Practice Center
HID	Health Information Department
HO	Health Organization
IUD	Intrauterine Device
KR	Kyrgyz Republic
KHRRC	Kyrgyz Human Reproduction Research Center
LAM	Lactational Amenorrhea Method
LNG-IUD	Levonorgestrel-Containing IUD
LMIS	Logistics and Management Information System
MD	Medical devices
MHI	Mandatory Health Insurance
MHIADPP	Mandatory Health Insurance Additional Drug Package Program
MHIF	Mandatory Health Insurance Fund
MOL&SD	Ministry of Labor and Social Development
MoH KR	Ministry of Health of Kyrgyz Republic
NM&CPC	National Mother and Children Healthcare Center
PC	Primary healthcare
POC	Progestin-Only Contraceptives
POBCP	Progestin-Only Birth Control Pills
POIC	Progestin-Only Injectable Contraceptives
PWD	Persons With Disabilities
RH	Reproductive Health
KSMIPE	Kyrgyz State Medical Institute for Postgraduate Education
SGP	State Guarantees Program
SRH	Sexual and Reproductive Health
SW	Software
TH	Territorial Hospital
TMA	Total Market Approach
WB	World Bank
WHO	World Health Organization
WRA	Women of Reproductive Age

Glossary of Terms

Aseptics - the conditions and a set of measures aimed at preventing microbial and other contamination upon receipt of sterile products at all stages of the technological process.

Aseptic Block - a pharmacy territory specially designed, equipped and used to reduce the penetration, formation and retention of microbiological and other contaminants therein.

CWD - children with disabilities

Chain Leaders are skilled people that should record, analyze, manage, and use supply chain data at every HO level.

Contraceptive - a product used by a client / couple to prevent an unwanted pregnancy.

Expiration Date - the date indicated on the individual packaging (usually on the label) of the medicine until which (inclusive) the medicine must meet the specifications, provided that it is stored correctly. For each consignment, this date is determined by summing the storage period and production date.

FP is a complex of medical, social and legal measures carried out with the aim of giving birth to desired children, regulating the intervals between pregnancies, controlling the time of childbirth, and preventing unwanted pregnancies.

Group Packaging is packaging that combines a certain amount of medicines, medical devices, medical equipment in consumer packaging.

Labeling is a process of choosing the right label with all the necessary information followed by checking and attaching the label.

Low-Income Family is a family with a monthly income per family member below the guaranteed minimum income (the latest data for 2018 was 900 soms per 1 family member) (The KR Law No. 163 dated July 28, 2017 "On State Benefits in KR")

Material(s) is a general term used to refer to the starting material (active pharmaceutical ingredients and excipients), reagents, solvents, intermediates, packaging material and labels.

Medical Eligibility Criteria for the Use of Contraception Methods is a document in which evidence is gathered and systematized to determine the possibility of safe and effective use of birth control methods in question concerning people with certain health disorders.

Packaging of Medicine - means or complex of means ensuring their protection against damage and loss.

Packaging consists of primary (internal) and secondary (external) packaging:

- primary (internal) packaging is packaging which directly contacts with the dosage form;

- the secondary (external) packaging is packaging in which the medicine is placed in the primary packaging.

Medical Risk Group - a medical term, a collective definition for members of population most vulnerable to certain medical circumstances that could lead to disability or death.

Packaging Material is material, including printed material, used for packaging of pharmaceutical products, excluding external packaging for transportation and loading. The packaging material may be primary or secondary, depending on whether it comes into direct contact with the product.

Pearl Index shows the number of cases of contraceptive failure in 100 women in one year. Simply, it is the number of unplanned conceptions against the background of the use of the chosen contraception method in 100 women, monitored for one year.

Person Responsible for Quality is a person responsible for ensuring quality in the implementation of the activities of the organization.

Person with Disabilities (PWD) is a person who has a health disorder with persistent dysfunction of the body due to diseases, consequences of injuries or defects that lead to disability, and necessitating his / her social protection and rehabilitation

Pollution is unwanted introduction of impurities of chemical or microbial origin or foreign substances into the source material, or into an intermediate or final product in the process of manufacturing, sampling, packaging or repacking, storage or transportation.

Reproductive Rights - a set of human rights that are based on the recognition of the fundamental right of all couples and individuals to make independent and responsible choices regarding the number of children they are going to have, duration of time intervals between births and time of their birth, and to gain access to the information and means necessary to make such a choice, as well as to recognize the right of each individual to achieve the highest level of sexual and reproductive health.

Shelf Life of a Medicine is the time set for the use of medicines, during which their safety, efficacy and proper quality are guaranteed subject to storage conditions in accordance with the requirements of regulatory legal acts.

State Pharmacopoeia is a collection of pharmacopoeial articles. Until the creation of the State Pharmacopoeia of KR, the following apply on the territory of KR: State Pharmacopoeia of the USSR of editions IX, X, XI, XII, International Pharmacopoeia, Pharmacopoeia of the USA (USP) and Germany (DAB), European Pharmacopoeia (EP), British Pharmacopoeia (BP), Chinese Pharmacopoeia (Ch. Ph), Indian Pharmacopoeia (Ind. Ph), Pharmacopoeia of the Republic of Belarus, Republic of Kazakhstan.

Sticker (Label) is an additional tag on the package containing information about the medicine in the state and Russian languages.

Storage Facilities are production facilities specially allocated, equipped and intended for the storage of medicines, MD and medical equipment.

Storage of Medicines is the process of placement (warehousing) of a product with ensuring storage conditions from the moment it is delivered until the moment it is received by the consumer.

Storage in a Dark Place is the storage of medicines, MD in a place protected from sunlight.

Storage in a Dry Place is storage of medicines, MD, medical equipment in facilities with a relative humidity of not more than 60 percent.

Storage in a Cool Place is the storage of medicines, MD, medical equipment at temperatures from +8 to +15 degrees Celsius.

Storage at Room Temperature is storage of medicines, MD, medical equipment at temperatures from +15 degrees up to +25 degrees Celsius (including if the temperature is not indicated).

Supplier is a person who ensures the supply of pharmaceutical products on demand. Suppliers can be agents, intermediaries, distributors, manufacturers or sellers. As a rule, suppliers should be authorized by competent authorities.

Transport Packaging is packaging that forms an independent transport unit.

Unmet Need for FP is the percentage of women who are healthy (able to conceive), sexually active, declare that they do not want to have children anymore, or want but later, but do not use contraception methods.

INTRODUCTION

Reproductive and sexual health is an integral part of human health and a healthy society. Maternal and child health measures initiated and implemented by MoH KR to reduce maternal and child mortality have yielded positive results in recent years. However, despite the downward trend, maternal mortality rates in KR still remains high among the Eastern European and Central Asian countries.

Along with the reasons related to direct provision of healthcare services during pregnancy, childbirth and postpartum period, the majority of these deaths are associated with socio-economic factors and occur among medical and social risk groups of population. So, according to the second report of the National Committee for Confidential Enquiry into Maternal Deaths in KR for 2014-2015, out of 141 women, every third (32.2%) experienced financial difficulties and her family income was below the subsistence level. So, according to the National Statistics Committee of KR, 25.6% of population lived below the poverty line in 2017 (32.1% - 2015; 25.4 - 2016). Seventy four percent (74%) of them lived in rural areas (according to the estimates of the National Statistics Committee of the KR based on an integrated survey of household budgets and labor force, with quarterly coverage of 5016 households).

The increase of availability of modern family planning methods for women of reproductive age can significantly help to reduce maternal mortality, infant and child mortality, abortions and disability rates in KR.

According to the statistics, the use of contraceptives in KR has tended to decrease (from 35.1% in 2013 to 25.6% in 2017) in recent years, which is possibly due to the lack of domestic production of contraceptives, cessation of donor contraceptive supplies to the country, limited funding and lack of a system and mechanisms of procurement of contraceptives through the state budget.

Therefore, in 2017 with a support of UNFPA, MoH KR, Mandatory Health insurance Fund of KR and Population Committee of the Jogorku Kenesh of KR of the VI convocation carried out a number of advocacy events to draw the attention of Government and public to the issues of family planning and access to contraceptives. These campaigns resulted in the adoption of a resolution on the need to allocate state budget funds to procure contraceptives for women from the medical and social risk groups in order to prevent unwanted pregnancies, maintain the health of mothers and children, and reduce maternal and infant mortality.

Due to the above, it became necessary to develop the mechanisms for public procurement of contraceptives with subsequent logistics (delivery, storage, distribution) and monitoring of targeted contraceptives usage.

The purpose of this document is the development of a five-year plan for the public procurement of contraceptives, development of recommendations and a contraceptives procurement mechanism in order to meet the needs of WRA from the medical and social risk group.

Tasks:

1. Analysis of the current situation in Reproductive Health and FP in KR.
2. Identification of the category of WRA from the medical and social risk group in order to provide them with contraceptives procured from the funds of state budget.
3. Determining the list of contraceptives for public procurement with the consideration of their quality, safety and efficacy.
4. Projecting the need in contraceptives among women from the medical and social risk group for the next 5 years.
5. Evaluation of the national procurement systems and determination of an optimal procurement method for public procurement of contraceptives.
6. Revision and optimization of contraceptives distribution mechanism.
7. Determining a monitoring and evaluation mechanism of the efficiency of contraceptives usage.
8. Development of a five-year public procurement plan for contraceptives with a gradual increase of state funding to meet the needs of 50% of women from high medical and social maternal mortality risk groups until 2023.

1. ANALYSIS OF THE CURRENT SITUATION IN THE REPRODUCTIVE HEALTH PROTECTION AND FP OF THE POPULATION OF KYRGYZ REPUBLIC

1.1. Regulatory framework for reproductive health, family planning and social services

The regulatory legal acts of KR in the field of reproductive health recognize the reproductive rights of citizens as an integral part of human rights, guarantee the right to make a decision regarding the number of children and time of their birth, intervals between births, as well as the right to receive reliable and comprehensive information about condition and protection of their reproductive health, to choose and use methods of contraception.

The citizens' reproductive rights are enshrined in the Constitution of the Kyrgyz Republic (Article 34) and the Law of KR "On the Protection of the Health of Citizens in KR" (No. 6 of January 9, 2005). The recent legal document reflecting family planning issues is the Law of KR "On the Reproductive Rights of Citizens and Guarantees for Their Exercise" adopted in 2015 (No. 148 of July 4, 2015), which decreased the age (from 18 to 16 years) and expanded the rights of minors to receive reproductive health services.

Reproductive health issues are covered in the *Den Sooluk* National Health Reform Program for 2012-2016 (Resolution of the Government of KR No. 309 of May 24, 2012) and the National Strategy for Reproductive Health of the KR population until 2015 (The Decree of the President of KR No. 387, of July 15, 2006). However, these documents do not fully provide the mechanisms and guarantees to exercise the enshrined reproductive rights, as well as they do not provide clear identification of the government agencies and their responsibilities and powers due to the lack of developed and approved by-laws and regulations have not been, and lack of system for state funding of public procurement of contraceptives.

The KR Law "On Health Insurance of Citizens of the Kyrgyz Republic" (No. 112 dated October 18, 1999) provides MHIF with the right to allocate funds for healthcare development, to contribute in the financing of targeted health programs in order to strengthen public health and prevent diseases.

The KR Law "On Medicines" (No. 91 dated April 30, 2003) specifies the rights of the authorized state body of KR in the field of healthcare to determine the volume of consumption of medicines, to determine the Essential Medicines List, including contraceptives, and submit it for approval by KR Government, as well as to carry out a centralized procurement of medicines with the funds from the republican budget, grants and loans.

The State Guarantees Program is operating in the country. This program provides free medical support to the citizens with certain diseases on an outpatient basis as part of the Mandatory Health Insurance Additional Drug Package Program (MHIADPP). This support is provided through the pharmacy network. The MHIADPP for the medicine provision of insured citizens on an outpatient basis has been introduced in the country

in 2000. The purpose of this program is to improve the availability of medicines to insured citizens at the primary healthcare (PHC) level. Based on the MHIADPP, insured citizens who are assigned to FMP use the prescription from a family doctor or FOP (feldsher-Obstetric point) paramedic to purchase medicines from pharmacies that have signed agreements with the Mandatory Health Insurance Fund (MHIF) regional offices, paying only part of the cost (about 50%), while MHIF reimburses the rest of the cost to the pharmacies.

The list of medicines under the Additional Drug package of the Mandatory health insurance program is compiled on the basis of the Essential Medicines List (EML) and it has to be improved by the Government of KR (the current EML was approved by KR Government Resolution No. 274, dated June 6, 2018). Five contraceptives (Tri-Regol, Rigevidon, Regulon (removed from the list in 2018), Depo-Provera, Intrauterine contraception) have been included in the directory of medicines subject to reimbursement under the Mandatory health insurance Additional Drug Package program and the state guarantees program at the outpatient level. The existing EML needs to be expanded because it is limited in terms of contraceptives variety, It is also important to note that today a part of the sexually active population - students and non-working youth - remains uninsured and does not have access to medicines under the mandatory health insurance Additional Drug Package program, including contraceptives.

KR Laws “On the Basics of Social Services for the Population in KR”, “On Public Procurement of Social Services”, “On State Benefits in KR” establish the issues of social security of citizens and legal regulation in the field of social services for the population.

The KR Law “On the Basics of Social Services for the Population of KR” (No. 111 dated December 19, 2001) establishes the basis for legal regulation in the field of social services for the population. The Law establishes that the state guarantees citizens the right to social services in the state social services system for the main types defined by this Law, including the right to social and medical services.

The KR Law “On State Order on Social Services” (No. 162 dated July, 21 2008), regulates legal and organizational basis for the development, placement and execution of public procurement of social services in order to implement social programs aimed at improving the efficiency of state budget funds allocated to resolve socio-economic problems and improve the quality of social services provided to the population.

The KR Law “On State Benefits in KR” (No. 318 dated December 29, 2009) defines the categories of population entitled to state benefits as well as the types and size of these benefits.

KR has developed and approved clinical protocols for oral and injectable contraceptives, intrauterine devices, as well as standards for surgical procedures for IUD. There are Guidelines applied to monitor the quality of FP health services.

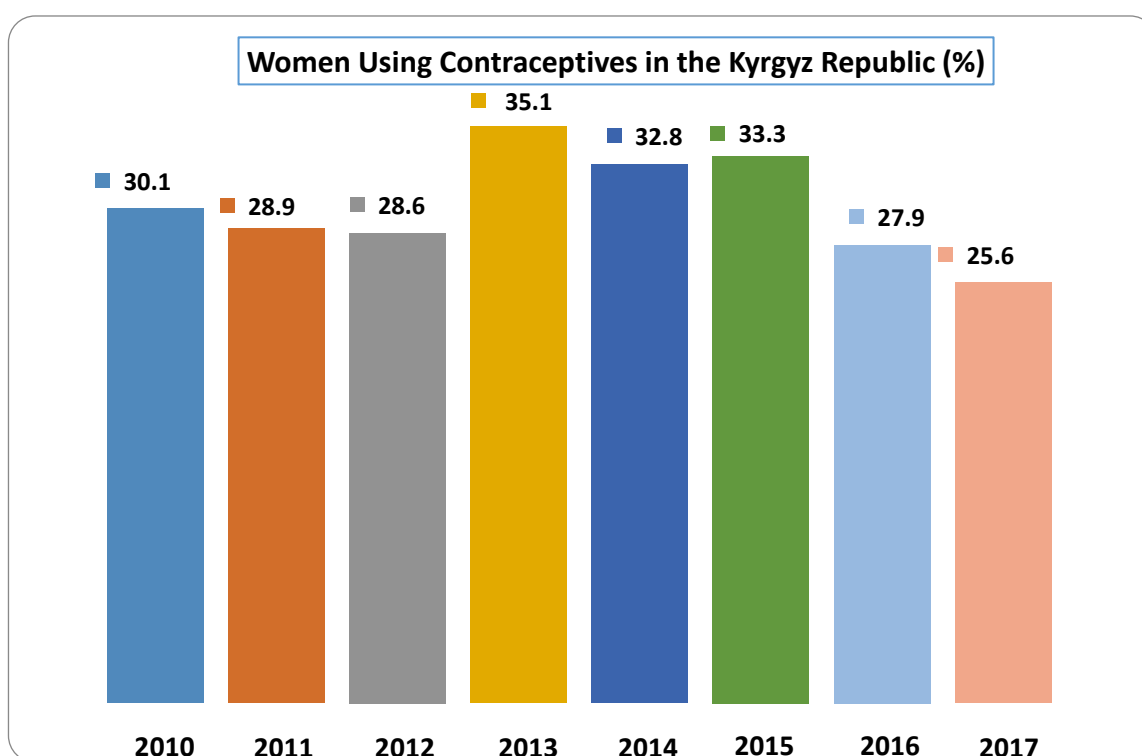
1.2. Reproductive Health Protection Statistics

The key indicators of reproductive health are considered to be the birth rate, infant and maternal mortality, abortion rate and frequency of use of various types of contraceptives by the population of reproductive age.

Over the past 5 years, the birth rate in KR has had a steady upward trend. The country has achieved a significant reduction in infant mortality. Despite the continuing downward trend in recent years, the maternal mortality rate remains high and is among the top in CIS. Along with the main maternal mortality causes (hemorrhage, hypertensive pregnancy disorders, sepsis), the share of maternal mortality associated with extra genital pathology (39.6%) and abortion (4.2%) remains high.

All of this shows the need to work more intensively on the use of modern reliable, highly effective, safe contraceptives. However, according to the statistics, the use of contraceptives in KR tends to decrease in recent years (from 35.1% in 2013 to 25.6% in 2017), (see Diagram 1).

Diagram 1



High levels of coverage with contraceptives in 2013-2015 were associated with constant contraceptives supply to the country with the help of international organizations. Until 2015, the United Nations Population Fund (UNFPA) was the main supplier of contraceptives, which significantly improved the situation with contraceptives provision in the country, especially among vulnerable groups.

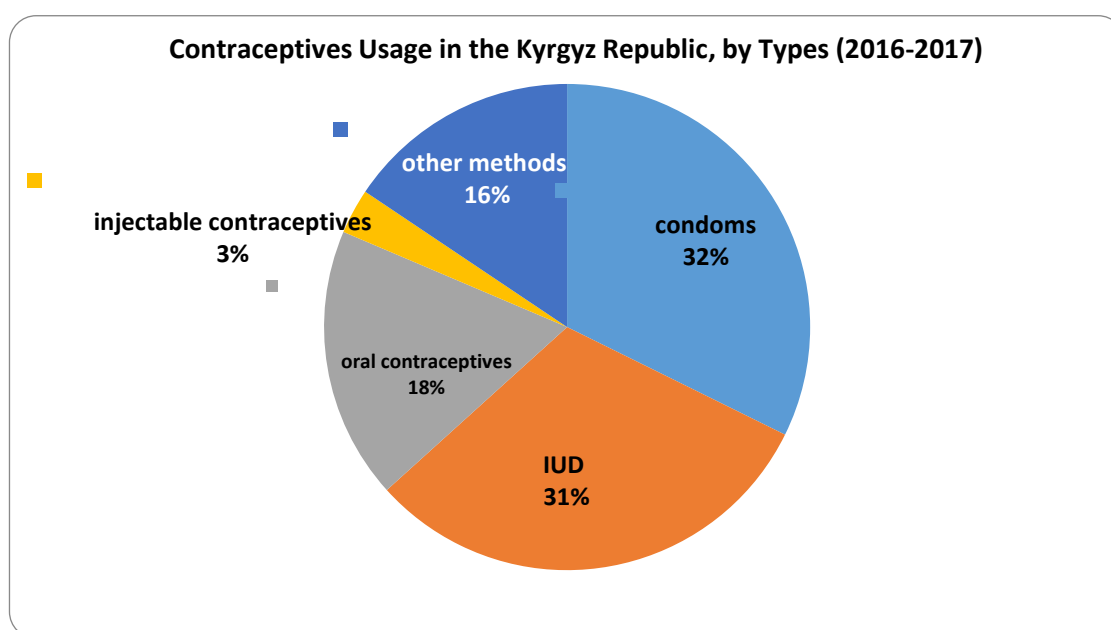
However, the lack of mechanisms for public procurement of contraceptives has already

started to create problems with the sustainable contraceptives provision not only to vulnerable groups of population, but also to the entire population due to the overall decrease in the contraceptives coverage (35.1% in 2013, and 25.6% in 2017).

As of 2017, the contraceptive use rate among sexually active teenage girls remains extremely low (12-14 years old - 0.06%, 15-17 years old - 1.1%, 18-19 years old - 7.7%,).

Condoms are the most popular type of contraception (32.3% of couples use them) among women who use contraceptives (data of 2017). Despite the fact the efficacy of the method is 85-95%, it has a “triple” protection effect (Diagram 2). Slightly inferior to them in preference are intrauterine devices (31% of couples); oral contraceptives (18.1%) are on the third position, although the efficacy of these methods is almost 100%. About 3% of WRA use injection contraceptives; other unwanted pregnancy prevention methods account for 16%. Implants, vaginal rings and transdermal patches containing hormones are not used in the country, because they are not registered. There are no trained vasectomy health workers. Female surgical sterilization is carried out more often during cesarean section delivery or by mini-laparotomy.

Diagram 2



The unmet need for FP refers to WRA who do not use contraception, but would like to delay the birth of the next child or completely stop childbearing. According to two recent studies, the unmet need for FP has insignificantly decreased for postponing of childbearing, whereas for limiting of childbearing it has increased 1.3 times. Based on the 2014 MICS, the overall unmet need for FP remains high at the level of 19.1%, which is higher than that of 2012 (18.0%).

In order to preserve a woman's reproductive health it is necessary to observe the optimal birth spacing, which is 2-3 years. Shortening this gap causes anemia and other extragenital pathologies in the woman, which leads to adverse outcomes of subsequent

pregnancies and the birth of a sick child. Intervals between births affect not only the fertility, but also health of mothers and children. According to the 2012 Demographic and Health Survey (DHS KR-2012), almost half of all births follow the recommended birth spacing, with the best rates observed in Bishkek City and Chui Oblast, (58% and 55% of births, respectively), and the worst in Talas Oblast, where only 37 % of births are close to this interval. However, more than one quarter (26%) of births in the country occur in less than 24 months after the previous birth (DHS KR-2012). Talas oblast again has the leading position in this case (36%). Studies show that short intervals between births are associated with an increased risk of death for both the mother and the baby. The risk of death increased for children born in the period of 24-35 months after the previous birth (24% according to DHS KR-2012), which differs them from children born within 36 or more months after the previous birth. In this aspect, the worst indicators were observed in Batken Oblast and the city of Osh (29% and 32%, respectively).

As of 2013, the share of women with a birth spacing of up to 3 years is 30.4% (28.2% in 2008) of the total number of births, with a 3-year and longer birth spacing - 37.9%. A high proportion of births with an interval between deliveries of up to 3 years indicates a lack of public awareness that contraceptives are the main tool for Family Planning. From among children born out of statutory marriage (up to 39 thousand in 2016 and up to 40 thousand in 2017), for about 1/3, their mothers were registered as the only parent. Most likely single mothers will raise these children, with no father. The share of children born from single mothers grows, and it creates certain social concern. The children registered by a joint statement of both parents are often regarded as having been born in an unofficial marital union.

Prevention of unwanted pregnancy, except termination of pregnancy through unsafe abortion, allows preventing the development of undesirable consequences of abortion, such as infertility, acute and chronic inflammatory diseases of the female genital organs, miscarriage, ectopic pregnancy, and, in some cases, uterine perforation, hemorrhage, septic complications or even death of the woman.

Termination of pregnancy in KR is permitted on all grounds, including saving the woman's life, maintaining physical and mental health, in cases of rape or incest, due to fetal damage and for social and economic reasons. The rate of abortions remains high (12.3 per 1000 WRA, 2017), especially between the ages of 20 and 34, as some women use abortion as a FP method. The country creates the conditions for universal availability of safe (medical) abortions. However, the rate of "unsafe" abortions is high. So, the rate of instrumental abortions constitutes 3.5%; 5.7% of women with an unplanned pregnancy use abortion for medical reasons, and 0.4% - for social reasons (2017).

Girls under 18 have difficulties with access to safe abortion because for this procedure the consent of the parents is required. In such a situation, it is likely that the pregnant woman may resort to criminal abortion, which is a threat to the woman's health and life. Abortions among adolescent girls aged 12 to 19 occur from 0.01% to 6.7% (2017).

Services in the field of men's health are not being provided at the proper level, especially in rural areas. Vulnerability of men's RH is closely related to existing stereotypes that

support risky behavior of men that does not allow any failure. Therefore, measures to protect the RH of men should take into account gender approaches, local specifics and mentality.

At the moment the state policy in the country aimed at comprehensive sexuality education for adolescents and young people is not present; training programs for comprehensive sexual education are insufficient; youth-friendly programs in this sensitive subject are lacking as well. All of these prevent youth from free access to sexual and reproductive health services.

1.3. Medical and social risk group

The analysis of the needs and problems of providing the KR population, with FP tools including low-income and socially vulnerable groups was performed in 2014. The outcomes of this analysis show that categories of WRAs included in the risk groups must be reviewed.

MoH KR Order (No 170 dated April 8, 2015) approved the "List of Categories of Persons in the Medical and Social Risk Group" taking into account the "List of Diseases (Conditions) subject to Termination of Pregnancy for Medical Reasons" approved by MoH KR Order No. 618 dated August 24, 2009.

The list of categories of persons in the medical and social risk group, in accordance with MoH KR Order No 170 April 8, 2015

I. Risk group on medical indications:

- Epilepsy without mental disorders
- Mental disorders
- Coronary heart disease
- Hypertensive disease with organ damage
- Respiratory diseases with respiratory failure (including asthma)
- Cirrhosis of the liver
- Diseases of connective tissue (lupus erythematosus)
- Aplastic anemia
- Diabetes mellitus
- Diabetes insipidus
- Oncological diseases
- Tuberculosis
- Alcohol and drug addiction
- HIV AIDS
- Glomerulonephritis (chronic kidney disease - N00-N19)

II. Social risk group

- Persons with disabilities since childhood groups I, II, III
- Persons with disabilities groups I, II, III in the absence of the right to pension

provision

- Children with disabilities (under 18 years old)
- Low-income families

III. Families with many children (large families)

The “List of Categories of Persons in the Medical and Social Risk Group” made amendments to the “Directory of Codes of Population Categories” approved on October 10, 2017 by joint orders of MoH KR (No. 900) and the MHIF under KR Government (No. 265), based on which the “Assigned Population” electronic DB is formed.

The data of the “Assigned Population” DB was used for preparation of the material for calculating the need in contraceptives among the categories of persons included in the medical and social risk group. These data are being submitted quarterly to the EHC by primary healthcare organizations from all regions of the country. The information on the number of WRA from low-income families was also obtained from this DB.

The MOL&SD data were also used for two categories of persons represented by this Ministry: persons with disabilities from childhood groups I, II, III and children with disabilities (under 18). Currently, "Assigned Population" DB is in the process of switching to on-line mode. This will allow obtaining up to date and quality information for public procurement of contraceptives.

1.4. Human resources in the field of RH protection

In the context of health care reforms and the development of market relations in Kyrgyzstan, an imbalance has arisen between rural and urban areas in terms of staffing with qualified health personnel, and access to quality medicines. The issue of ensuring public access to quality and effective contraceptives and counseling on their use remains a critical issue.

Services for reproductive health and family planning are provided in FP Rooms (FPR) at regional and urban FMCs (65), GPCs (27), in the FMPs that are part of the FMCs (691), in legally independent FMPs (17) and FOPs (1007). Advisory, methodological and practical assistance is provided at the level of city and rayon territorial hospitals, as well as at a higher level: in the NM&CPC, KHRRC, in the Oblast Human Reproduction Centers in Jalal-Abad and Issyk-Kul oblasts, in the “Marriage and Family” departments at the oblast FMCs (Chuy, Talas, Naryn and Batken oblasts) and in united hospitals in 7 oblasts.

According to official statistics, about 1,600 family doctors (31.5 per 10 thousand people) and 1002 obstetrician-gynecologist (1.8 per 10 thousand people) provide reproductive health service. The provision of population with specialists is disproportionate, as they are concentrated mainly in the cities of Bishkek, Osh and oblast centers, while in the regional THs, the availability of specialists is very low (up to 0.1 per 10 thousand people), and there are no specialists at all in some regions.

All health specialists constantly take short-term advanced FP training courses (full-time

and remotely) at KSMIPE, including its southern branch, get trained in the framework of technical support programs of international projects and donors (UNFPA, USAID, UNICEF, WB, SWAp:WB, SDC and KfW). There are no training courses for health workers on the use of hormonal implants. To improve the delivery of postpartum and post-abortion services, health staff at obstetric hospitals and FMCs are trained in postpartum (post-placental and within first 2 days) and post-abortion IUD insertion skills. However, low wages, external and internal migration of trained specialists lead to a decline in the quality of professional care.

1.5. Analysis of the pharmaceutical market and humanitarian supplies

In KR, the following medicines of 4 companies are registered, which belong to the segment of hormonal contraceptives:

Pharm Company / Country of Manufacture	Names of medicines
Gideon Richter OJSC, Hungary	Postinor, Escapel, Lindinet 20, Lindinet 30, Midiana®, Novinet®, Regulon®, Belara, Dimia®, Rigevidon®, Tri-Regol®
Bayer Weimar GmbH & Co. KG, Germany	Jess®, Diane 35®, Yarina, Janine®, Klaira®,
Pfizer, USA	Depo-Provera
Leon Farma, S. A., Spain	Airlin

The price of one oral contraceptive blister (21-28 tablets) varies from 180 soms (\$ 2.9) to 827 soms (\$ 13.3). The price of emergency contraception medicines is more than 400 soms (\$ 5.5) in the pharmacy network. The registered injection contraceptive Depo-Provera (MOPAPD) was imported to the country only through humanitarian aid. In addition, hormonal implanted contraceptives are not available in the market. These medicines are included in the Essential Medicines List, but are not yet registered in the country.

Four of these hormonal contraceptives (Tri-Regol, Rigevidon, Regulon, Depo-Provera) can be acquired at a discount under MHIADPP.

UNFPA was the main provider of hormonal contraceptives as part of its humanitarian aid program. So, for the 2011-2015 period alone, the following hormonal contraceptives were imported to the country: Marvelon No. 28 in the amount of 240,300 packages, Zinnia F No. 28 (60,000 packages), Microgenon 30 No. 28 (330,480 packages), Microlut No. 35 (91,440 packages), Depo-Provera (20,600 vials). This volume of supply is significant and market forming.

3 brands of the intrauterine devices segment are registered in the country: The Yunona intrauterine contraceptives by Simurg CJSC (Belarus) with 19 versions, Eloira - Pregna International Ltd (India) and the LNG IUD Mirena (Bayer), "Corporate Channels" company. Also, other brands are present in the retail market: Multiload KU-375 (Organon), Nova T Cu. The copper-containing IUD is included in the General Health Insurance list, which allows reducing its cost to the consumer.

According to the DDS&MD, between 2011 and 2012, only copper-containing IUDs were delivered to the country in the amount of 415,000 units as part of humanitarian aid.

In KR, 2 brands of intravaginal non-hormonal contraceptive medicines are registered in the form of vaginal suppositories, tablets, capsules, cream of the French Laboratory Innotek International company (trade name Pharmatex) and the Russian Nizhpharm OJSC company ("Benatex®").

According to the 2011 - 2015 DDS&MD data, the country did not receive intravaginal non-hormonal contraceptives as humanitarian aid.

In the pharmaceutical market, only male condoms represent barrier contraceptives. According to the State Register of Medicines and MD, 251 names of male condoms are registered from the following manufacturers:

1. Contex (Suretex Prophylactics (India), Ltd, SSL Manufacturing (Thailand), Ltd)
2. Vie'tex, Date X, Ego, Intim service, Relax (Guilin Latex Factory (China), Guilin Zizhu Latex Co., Ltd (China))
3. Durex (Quindao London Durex Co., Ltd (China), Karex Industries SDN. BHD (Malaysia), SSL Manufacturing Ltd (Thailand))
4. M. DIOR JiaLeWei (China)
5. PUR, Maskulan (M. P. I. Pharmaceutica GmbH (Germany))
6. VIZIT, Sico (CPR Productions und Vertriebs GmbH (Germany))
7. VIVA (Karex Industries Sdn, Bhd (Malaysia))
8. Barkhat (Velvet) (Isshaan Healthcare Pvt. Ltd (India))

The condom prices vary from 2 to 27 soms per 1 piece.

Additionally, male and female condoms were supplied to the country as part of humanitarian aid by UNFPA and HIV programs. Between 2011 and 2013, 10,803,488 male condoms, 365,000 female condoms were delivered.

Other barrier methods types (diaphragms, caps) were not imported to the country.

Increased access of WRA to modern family planning methods can significantly affect the decrease in maternal and child mortality, the number of abortions and disability in KR.

1.6. Accounting and reporting on contraceptives

Accounting, control of the contraceptives movement and the formation of summary reports is an important part of work with contraceptives. MoH KR Order "On Approval of Primary Medical Records and Quarterly Statistical Reporting on the Accounting of Contraceptives movement and usage" (No. 170, dated April 8, 2015) approved the "Journal of Contraceptive Movement Control" (Form No. 040/u), the "Contraception-Using Medical and Social Risk Group Patient Card" (Form No. 040-1/u) and the quarterly "Contraceptives Movement Report" form (Form No. 12-2).

The “Journal of Contraceptives Movement Control” (hereinafter referred to as the “Journal”) is the main statistical and accounting document that reflects information on the contraceptives movement and usage, as well as the main document for timely projections of the need in contraceptives. The Journal is kept at HOs of all levels, which carry out work related to contraceptives accounting. The Journal is kept by the persons responsible for receiving, storing and delivery of contraceptives (at the central warehouse, the HO head nurse, FP Room doctors, FMP doctors, hospital, FMP nurses, FOP paramedics, midwives. The data on the number of contraceptives provided to persons from the medical and social risk groups are highlighted in the Journal.

All operations on the receipt and expense of contraceptives should be recorded in the Journal in a timely manner. Upon receipt, the date of receipt, series and expiration date of the contraceptives must be recorded in the Journal.

Contraceptives are handed over if the recipient (the specialist responsible for contraceptives, the patient) has put his/her signature in the Journal.

Credentials that are recorded in the Journal in a timely and correct manner in accordance with primary receipt and expense documents (invoices/requests) serve as the basis for quarterly reports.

For the purpose of rational use and projection of the need in contraceptives by the members of the medical and social risk group is recorded in the “Contraception-Using Medical and Social Risk Group Patient Card.”

A “Contraceptives Movement Report” is compiled quarterly by the HO specialists responsible for receiving, storing and issuing contraceptives to FMC, FMP, FOP, hospitals based on monthly reports submitted to the accounting department and approved by the HO head. The report is prepared four times a year, with a cumulative total: for the 1st quarter, 6 months, 9 months, and year. The report also reflects data on the number of contraceptives issued to persons from the medical and social risk group.

Reports on the contraceptives movement at the level of primary healthcare HO are compiled from the FOP and FMP level. Summary information on HO is formed in the FP Room, together with the medical information department, taking into account the balances in the pharmacy warehouse. The summary report on the regional HO is submitted to the Oblast Medical Information Centers, where a summary report on the oblast is formed, taking into account oblast level balances, which is agreed on with the FP coordinators of the regions (Oblast Human Reproduction Centers/OFMC).

The person responsible for receiving and issuing contraceptives to users in HOs is responsible for the completeness, accuracy and timeliness of the accounting and reporting documentation.

Summary reports by oblasts, HOs of Bishkek and Osh Cities are submitted to the E-Health Center at MoH KR, where summary information is compiled on the costs and balances of contraceptives in the country, taking into account the balance of contraceptives in the

DDS&MD warehouse. This information is used to analyze the situation and project the need in contraceptives in the healthcare system.

Reported data from the HO level is entered and submitted to higher authorities in electronic format using the “12-2 Report” software (SW).

Additionally, data collection in the 12-zdrav reporting form called “FMC, FMP and Medical Dispensary Activities Report” has been introduced since 2018 on the use of contraceptives by risk group members with specification by types of contraceptives, which will allow more accurate planning of the need of this group in certain types of contraceptives. With the support of UNFPA the CHANNEL software has been introduced in DDS&MD and all HOs providing FP services. This allows managing contraceptives stock in warehouses.

Based on the journals entries, the contraceptives movement data are entered into the CHANNEL SW at the pharmacy warehouse and FP Rooms.

The CHANNEL SW allows preventing untimely contraceptives usage (due to expiration), plan the minimum (three-month), semi-annual and annual contraceptives supply.

Currently, the CHANNEL SW is being finalized for integration with the 1 S-Bookkeeping SW; there are plans to use it to manage other medicines stockpiles, including in in-patient health organizations.

The above accounting and reporting system is included in the **contraceptives logistics management information system** (Contraceptives LMIS).

Contraceptives LMIS is a system for management (accounting and reporting) of information, as well as material (receipt, movement, expenditure) flows of contraceptives based on the physical and technological aspects, which is designed to ensure the optimization of all processes.

Contraceptives LMIS was created in the country in collaboration between MoH KR and the United Nations Population Fund in Kyrgyzstan (UNFPA).

The most important tasks of the LMIS are:

- effective, targeted contraceptives usage and planning;
- ensuring the necessary level of contraceptives in-stock;
- collection, compilation and submission of information from all levels of the healthcare system at the regional and central levels.

Health personnel responsible for contraceptives, together with specialists from the medical information departments/organizations, need to analyze the LMIS data at each level in order to manage their efficient use.

Role allocation in the LMIS:

MoH KR

- Projecting the need in contraceptives;
- Allocation of funds/fundraising for contraceptives procurement;
- Receiving orders;
- Monitoring;
- Monitoring the efficiency of use and in-stock availability of contraceptives;
- Analysis of the current situation.

Republican (NM&CPC, KHRRC, DDS&MD) and oblast (Oblast Human Reproduction Centers / OFMC) level HOs:

- Patient care;
- Contraceptives records keeping;
- Ensuring proper contraceptives storage conditions;
- Monitoring the efficiency of contraceptives usage, stock and expiration dates;
- Determination of the contraceptive requirements among women from the medical and social risk group;
- Developing an order for contraceptives distribution among the regions/structural units of the republican/oblast level HOs;
- Contraceptives distribution among the regions/oblast HOs/structural units of the republican/oblast level HO;
- Preparation of contraceptives requests;
- Compilation, submission of the oblast reports/summary information on contraceptives movement and usage;
- Contraceptives delivery to the oblast/rayon level HOs, with the provision of appropriate transportation conditions.

Rayon level HOs coordinating the work related to contraceptives (rayon FMCs):

- Patient care;
- Keeping records related to contraceptives;
- Ensuring proper contraceptives storage conditions;
- Monitoring the efficiency of contraceptives usage, stock and expiration date;
- Determination of the contraceptive requirements among women from the medical and social risk group;
- Drawing up an order for contraceptives distribution among regional HOs / regional FMC structural units, taking into account the needs;
- Contraceptives distribution among the rayon HOs /regional FMC structural units;
- Preparation of requests for contraceptives;
- Compilation, submission of the regional statistical reports/summary information on the contraceptives movement and usage;
- Contraceptives delivery to structural units with the provision of appropriate transportation conditions.

HOs (FMC, GPC):

- Patient care, with the entering of contraceptives usage information in the “Contraception-Using Medical and Social Risk Group Patient Card” (Form No. 040-1/u), “Outpatient Medical Records Form” (Form No. 025/u) in cases where the medicine was given to a patient who is not part of the medical and social risk group, “Contraceptives Movement Accounting Journal” (Form No. 040/u);
- Contraceptives records keeping;
- Ensuring proper contraceptives storage conditions;
- Monitoring the efficiency of contraceptives usage, stock and expiration date;
- Determination of the contraceptive requirements among women from the medical and social risk group;
- Compilation of an order for contraceptives distribution among the structural divisions of HOs, taking into account the needs;
- Contraceptives distribution, taking into account the needs, among structural units (including the FOP level);
- Preparation of contraceptives requests;
- Compilation, submission of the HO statistical reports/summary information on the contraceptives movement and usage;
- Contraceptives delivery to structural units with the provision of appropriate transportation conditions.

Key issues to be addressed in accordance with LMIS:

PROJECTING OR PLANNING the NEED/DEMAND

It allows determining the contraceptives requirement in order to meet the demand of patients from the medical and social risk group, to plan procurements and necessary financial resources taking into account the reasonable/efficient contraceptives price.

Needs must be projected using the “Assigned Population” DB installed at the primary healthcare level and which allows for the use of up-to-date data on persons from the medical and social risk group for planning purposes. It is assumed that, having felt the reduction of financial burden on the family due to availability of free contraceptives, patients from this group will be motivated to timely submit their documents to be included to the above-mentioned database.

AVAILABILITY

Currently, with only two types of contraceptives available in the primary healthcare organizations, it is difficult to talk about the adequate contraceptives provision for risk group women.

The LMIS created and implemented in Kyrgyzstan will allow monitoring the quality of distribution and efficiency of contraceptives usage, as well as projecting of the contraceptives need among risk group women.

QUALITY

The existing contraceptives supply chain allows ensuring the quality and efficiency of contraceptives usage.

There is no problem with contraceptives storage at the central level warehouses; however, there are issues with vehicles for the contraceptives delivery to the regions, as well as to the HO level, because currently these vehicles do not meet the requirements for proper transportation conditions.

It is also necessary to strengthen the capacity of the health workers to calculate the need in contraceptives for the medical and social risk group members, as well as strengthen the capacity of the relevant specialists who provide contraceptives transportation and storage.

PRESENTATION

The existing LMIS system needs the improvement of its visual component, moving it on-line, for more efficient contraceptives stock management, their use, as well as prompt presentation of information in case of contingency for adequate and timely decision making.

RISK MANAGEMENT

The introduction of LMIS and CHANNEL SW made it possible to prevent loss of contraceptives due to the expiry.

Possible risks of inefficient contraceptives usage may be reduced through high-quality projection of the need in contraceptives, effective distribution and prescription of contraceptives in accordance with the clinical protocol, as well as by monitoring the quality of accounting and efficiency of use.

However, certain risks of untimely contraceptives provision with untimely deliveries related to the problems with contraceptives transportation and others still remain. MoH KR has not developed a plan to prevent or mitigate these possible risks.

For more effective management of LMIS, additional electronic products need to be introduced in the MoH KR in the coming years:

- Creation of on-line Contraceptives LMIS, which will gradually replace paper based accounting and reporting forms with electronic products that can be used on cell phones, tablets and computers, and which will be connected to central DBs that provide managers of all levels with access to information for monitoring the entire contraceptives supply chain and movement;
- By 2020, expanding of the CHANNEL SW integrated with the 1 S-Bookkeeping SW to all HO's of the country that provide not only primary healthcare services, but also in-patient care, which would help monitor contraceptives distribution and consumption in HO through "1 S-Bookkeeping" SW;

- LMIS electronic data visualization solutions for more visual presentation of data on contraceptives supplies, distribution, movement, efficiency of usage, and warning users about any problems (for example, with contraceptives in stock, expiration date, etc.);
- Adding of the possibility of transport planning, loading time, delivery and vehicle route into the electronic management systems.

2. TYPES OF CONTRACEPTIVES PLANNED FOR PUBLIC PROCUREMENT

There is a wide variety of modern contraceptives in the world. Each of the methods has a different efficacy, its advantages and disadvantages, and duration of application. The choice of the method is based on the criteria for the medical acceptability of contraceptive use.

- **Hormonal contraceptives**

Combined: oral and injectable, in the form of a vaginal ring, patch.

Combined oral contraceptives (COCs) contain two types of hormones - estrogen and progestin. Depending on the amount and combination of these hormones, they can be divided into monophasic, biphasic and three-phase types.

Each monophasic COC tablet contains estrogen in the amount of 20-35 mcg and progestin in the amount of 50-200 mcg.

In biphasic COCs, the first 10 tablets contain 50 mcg of estrogen and 50 mcg of progestin, the remaining 11 tablets contain 50 mcg of estrogen and 125 mcg of progestin.

Three-phase COCs are available in the form of dragee, 6 tablets contain 30 mcg of estrogen and 50 mcg of progestin, 6 tablets contain 40 mcg of estrogen and 75 mcg of progestin, 10 tablets contain 30 mcg of estrogen and 125 mcg of progestin.

The efficacy of these medicines is among the highest and with proper use during the first year can achieve almost 100%. One blister contains 21 active tablets (hormone-containing tablets), in some blisters there are 7 additional non-hormonal tablets. Tablets are taken daily, orally, 1 tablet per day, for 21 days. Then a 7-day break in intake follows (or seven non-hormonal tablets continue to be taken). After this, the client starts taking the tablets from the next blister. The client/couple regulate the duration of contraception with COC. In addition to the contraceptive effect, COCs have a number of non-contraceptive functions and can be used to treat certain gynecological diseases. They can also be used for emergency contraception (Yuzpe method). In KR, some medicines of this group are registered and available in the pharmacy network.

Combined injection contraceptives (CIC) contain estrogen in the amount of 5 mg and progestin 25-50 mg. They are also among contraceptives with high (almost 100%) efficacy considering proper use during the first year. The frequency of use is 1 intramuscular

injection in 4 weeks (plus or minus 7 days). The client/couple can choose how long they want to use CIC. These medicines have a number of non-contraceptive therapeutic effects. They are not registered in KR.

The combined patch (CP) in the form of a flexible plastic square patch is intended to be placed on the skin. It contains progestogen and estrogen, similar to the natural progesterone and estrogen hormones. It is highly effective (almost 100%). The patch is replaced weekly for 3 weeks, followed by a weekly break, during which the woman menstruates. The client/couple regulate the length of CP application. It also has a number of non-contraceptive therapeutic effects. It is not registered in KR.

The combined vaginal ring is a flexible plastic ring placed in the vagina. 2 hormones - progestin and estrogen, which are artificial analogues of the natural progesterone and estrogen hormones - are continuously released from the inner part of the ring. The released hormones are absorbed through the vagina and enter the bloodstream. The ring is placed in the vagina for a period of 3 weeks, followed by a week-long break, during which the woman menstruates. The client/couple regulates the length of time for using the ring. It has a number of non-contraceptive therapeutic effects. It is not registered in KR.

Progestin-only contraceptives: oral (mini pills), injectable, implants

Progestin-only oral contraceptives contain one hormone, progestin.

These oral pills ("mini pills") are registered in Kyrgyzstan. Each tablet contains 300-500 mcg of progestin. Efficacy is almost 100% with proper use during the first year. The medicine is to be used daily, orally, 1 tablet per day, for 28-35 days, without a pause. Once the package is finished, the next one is to be taken. The client / couple can choose how long they can use the contraception. The medicine has a number of non-contraceptive therapeutic effects.

This can be used for emergency contraception. Tablets containing 750-1500 mcg of levonorgestrel are used only for emergency contraception. Both types of progestin contraceptives are registered in KR.

Progestin-only injection contraceptives in suspension contain 150 mg of medroxyprogesterone acetate, are highly effective, and applied once every 3 months (plus or minus 4 weeks). Additionally, they have a number of non-contraceptive effects. The use of this medicine requires a trained health specialist. The client/couple chooses the duration of use. It is registered in KR. The medicine containing 104 mg of DMPA is intended for subcutaneous injection. Additionally, it has a number of non-contraceptive effects. Can be administered by the client. The client/couple regulates the duration of use. It is not registered in KR.

Implants are plastic capsules (in the amount of 1 to 6, depending on the manufacturer) containing gestagen. Administered subcutaneously for 3 to 7 years (depending on the trading manufacturer). Additionally, they have a number of non-contraceptive effects.

The implant insertion and removal requires a specially trained health professional. The implants are not registered in KR; there are no trained specialists to administrate the use of implants; subsequently, there is no practice of using this contraceptive method.

- **Intrauterine devices:**

Copper-containing intrauterine device (Cu-IUD) is a plastic device with copper sleeves or a coil of copper wire. It is highly effective. Designed for intrauterine insertion. The client or a couple can regulate the duration of the IUD use, but only no longer than 12 years. Can be used for emergency contraception. The Cu-IUD can be inserted and removed only by a specially trained health worker. It is registered in KR.

A levonorgestrel-containing intrauterine device (LNG-IUD) is a plastic device containing the levonorgestrel hormone in the amount of 52 mg. Designed for intrauterine insertion. It is highly effective. Additionally, it has a number of non-contraceptive therapeutic effects. The client or a couple can decide the duration of use, but not longer than 5 years. The LNG-IUD can be inserted and removed only by a specially trained health worker. It is registered in KR.

- **Barrier methods** (male and female condoms, spermicides, diaphragms, caps)

The male **condom** is a thin latex case applied before each sexual contact. The female condom is made of a thin synthetic film. Effective up to 85-95%. However, these are the only methods that have double (triple protection) effect, i.e. additionally protect against HIV infection, STDs, incl. HBV, HCV. The client / couple regulate the duration of use. Registered in KR.

Spermicides are chemicals that include nonoxilone-9. They are administered into the vagina 15 minutes before each sexual contact. They have medium efficacy. May increase the risk of HIV infection among the risk group members. The client / couple regulate the duration of use. It is registered in KR.

The **diaphragm** is a soft latex cap, sometimes made of plastic, which is used in combination with a spermicide. Used no earlier than 6 hours before the intended sexual intercourse. The diaphragm should remain in the vagina for at least 6 hours, but not more than 24 hours after intercourse. The client / couple regulate the duration of use. Not registered in KR.

3. CALCULATION AND PROJECTION OF THE NEED IN CONTRACEPTIVES FOR WRA FROM THE MEDICAL AND SOCIAL RISK GROUPS

3.1. Calculation of the need in contraceptive products of WRA from the medical and social risk groups

In preparing the material for calculating the contraceptives requirement for the

categories of persons in the medical and social risk group, the PC data of the «Assigned Population» DB were used from all regions of the country.

The medical group database is formed and updated based on medical reports submitted by the specialists. So, the number of WRA in the medical group was 22,380 women. Information on the number of low-income and large families with many children, which is 4019 and 653 of people, respectively, is also taken from the Assigned Population database; it is dynamic and can change. Data on persons with disabilities since childhood in groups I, II, III (22762 women) and on children with disabilities (under 18 years old - 7412 patients) were presented by DSD&MD

Calculation of the need in contraceptives by different types was carried out using the “Medical Eligibility Criteria for Using Contraception Methods” (WHO, 2008) taking into account their efficacy, side effects and safety. The number of users of specific type of contraceptive was calculated at the initial stage of determining the need in contraceptives (see Annex 1).

Thus, the total number of persons from the medical and social risk groups who need free contraceptives constitutes 57,226 women. Presumably, 21698 women can use IUDs, 3508 - progestin-only injection contraceptives, 2949 - progestin-only contraceptive pills, 7716 women - combined oral contraceptives for contraceptive purposes. In addition, an estimated 21,356 couples will need condoms.

Then, the need was calculated for each type of contraceptives using the following formulas:

Annual need for IUDs = the number of persons from the risk group using IUDs: 12, taking into account that an IUD is set for 12 years;

Annual need for POIC = the number of persons from the risk group using POIC x 4 (4 vials of POIC per 1 user per year);

Annual need for POBCP = the number of persons from the risk group using KTPR x 11 (11 blister packs of KTPR per 1 user per year);

Annual need for COCs = the number of persons from the risk group using COCs x 13 (13 COCs per 1 user per year);

Annual need for condoms = the number of persons from the risk group using condoms x 120 (120 condoms per 1 user per year).

After appropriate calculations, it was found that the annual contraceptives need for 100% contraceptives coverage of WRA from the medical and social risk group is (to be procured): 1797 IUD pcs, POIC - 38588 vials, POBCP - 32442 blister packs, COC - 100305 blister packs, condoms - 2 562 691 pcs.

These calculations were made based on the data from the Assigned Population Database

as of the beginning of 2018; they are dynamic and can change.

3.2. Contraceptives need projection for 2019-2023

The need in contraceptives is projected in several steps:

- Contraceptives need projection for 2019-2023.
- Calculation of the average cost of each type of contraceptives in KR market in KR soms and US dollars.

Based on the contraceptives need projection for 2019-2023 and the cost of each type of contraceptives, as well as the exchange rate projection for 2019-2023, the projection of procurement of contraceptives in KR market is made.

To project the contraceptives requirement for 2019-2023, the calculation of the contraceptives requirement for 2018 (see Annex 1) and the 2018-2023 WRA population projection (see Annex 2) were used.

Based on the contraceptive requirements for 2018, information was used on the size of the target group (hereinafter - TG) and 2018 requirements for each type of contraceptives.

Since the TG makes up 57,226 women or 3.7% of the 2018 WRA population, this proportion was used to calculate the size of the TG for 2019-2023.

TG growth rate over the years was used to calculate the increase of the need for each type of contraceptives.

The results of the 2019-2023 contraceptives needs projection are presented in Annex 3.

3.3. Calculation of the average cost of each type of contraceptives in KR market in KR soms and US dollars

To calculate the average cost of each type of contraceptives in KR market, wholesale contraceptives price lists were collected from 8 companies between July 9, 2018 and August 15, 2018. To calculate the cost of the average exchange rate between July 9, 2018 and August 15, 2018 was used.

Progestin-only contraceptives are not yet available in KR market. Of the progestin-only injection contraceptives, Depo-Provera is registered with the DDS&MD; it is expected that this medicine will become available on the market at a wholesale price of \$4.5 in the near future. Progestin-only birth control pills are still not among those registered in the DDS&MD; thus, the medicine cost from UNFPA Catalog was used for calculation.

The results of average cost calculation for each type of contraceptives in KR market are presented in the table.

The average cost of contraceptives in KR market

Type of contraceptives	Average price in KR soms	Average price in US dollars
COC	684,09	9,76
IUD	198,00	2,83
Condoms	13,06	0,19

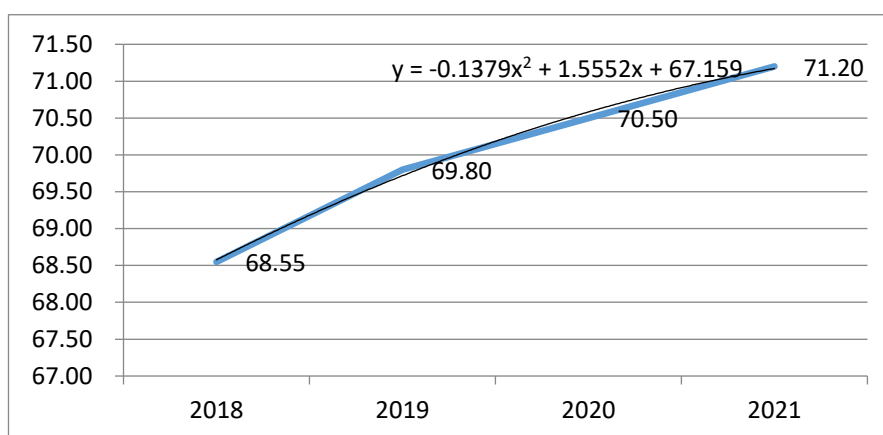
3.4. Projection of contraceptives procurement needs

Due to the fact that contraceptives are only imported but not produced in Kyrgyzstan, and government expenditures on KR territory are made in the national currency, it becomes necessary to apply KR soms/US dollars exchange rate projection for the projected period.

To project the rate, the following data were used:

- Exchange rate from January 1, 2018 through September 19, 2018¹
- Projected exchange rate from the Explanatory Note to the 2019 KR Republican Budget draft and 2020-2021 projection.

Based on these data, a regression model of the exchange rate was constructed and an equation was extracted to build a trend for the next projected period.



The results of the calculation of the exchange rate projection for 2019-2023 are presented in the table below:

Exchange rate projection for 2019-2023

	2018*	2019**	2020**	2021**	2022	2023
Som / Dollar	68,55	69,80	70,50	71,20	71,49	71,53

¹

http://www.nbkr.kg/index1.jsp?item=1562&lang=RUS&valuta_id=15&beg_day=01&beg_month=01&beg_year=2018&end_day=19&end_month=09&end_year=2018

*http://www.nbkr.kg/index1.jsp?item=1562&lang=RUS&valuta_id=15&beg_day=01&beg_month=01&beg_year=2018&end_day=19&end_month=09&end_year=2018

** - Explanatory note to the draft Republican budget of KR for 2019 and the projection for 2020-2021.

Using this exchange rate projection, the contraceptives procurement requirement was projected in both KR soms and US dollars with 100% target group coverage. The results are presented in Annex 4.

In a similar way, an alternative scenario was calculated with partial (incomplete) target group coverage. Coverage is defined as follows:

2019 - 20%;
2020 - 30%;
2021 - 40%;
2022 - 50%;
2023 - 50%.

The results are presented in Annex 5.

3.5. Comparison of the procurements projection from KR market and procurements from the UNFPA Catalog

The following medicines in UNFPA Catalog were selected for calculation:

	IUD	POC		COC	Condoms
		POIC	POBCP		
Name	TCu380 Intrauterine contraceptives (IUD), also called copper IUD, is a long-acting reversible contraception (LARC) device	SoloShot IX syringe, 1 ml vial, 22 G x 1 inch Medroxyprogesterone acetate 104 mg in 0.65 ml suspension for injection subcutaneously. Presented in pre-filled syringe. Regimen: every 3 months	Levonorgestrel 0.03 mg, tablets. Sales unit of measurement is one pack of 3 cycles. One cycle = 35 tablets	Levonorgestrel 0.15 mg + ethinylestradiol 0.03 mg, tablets. Sales unit of measurement is pack of 3 cycles. One cycle = 21 tablets	Male condom 51 mm, standard, natural
Package Cost	\$ 0.317 per piece	\$ 0.09 per Each \$ 0.85 per vial	\$ 0.90 per pack of 3	\$ 0.75 per pack of 3	\$ 3.15 per gross (144 pieces)

Cost per application	\$ 0.32	\$ 3.76	\$ 0.30	\$ 0.25	\$ 0.02
----------------------	---------	---------	---------	---------	---------

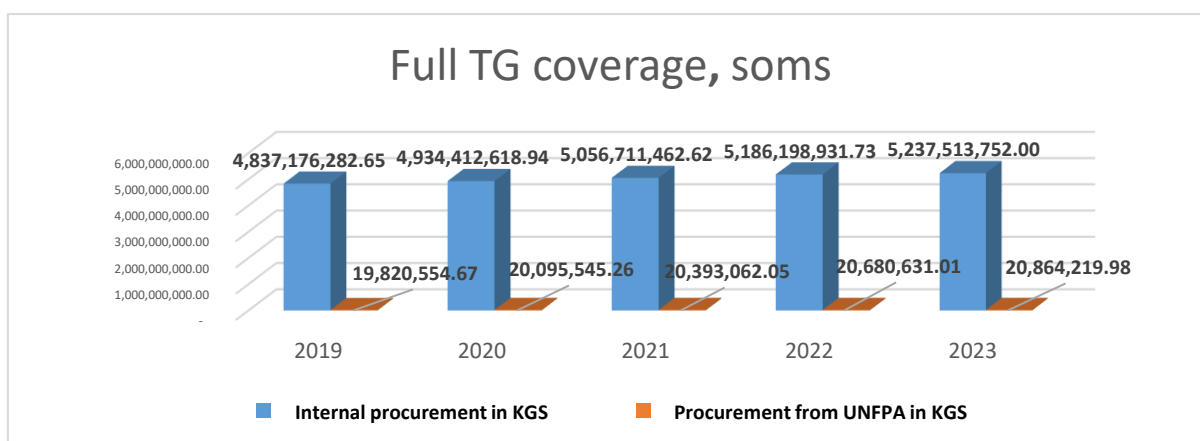
Using this exchange rate projection, the need in contraceptives procurement in both KR soms and US dollars was projected with 100% target group coverage. The results are presented in Annex 6.

Also, in the same way, an alternative scenario was calculated with partial/incomplete TG coverage. Coverage is defined as follows:

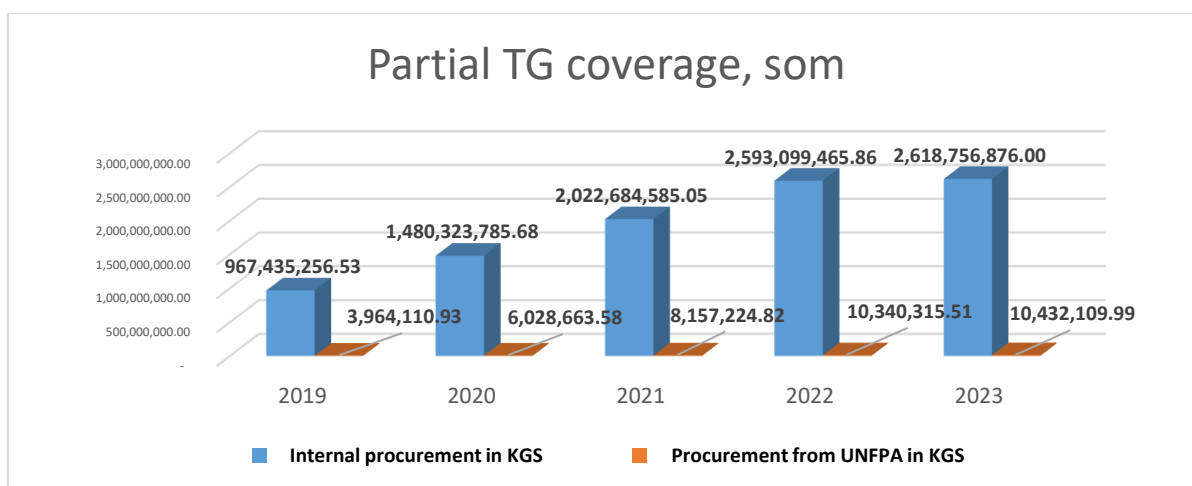
2019 - 20%;
2020 - 30%;
2021 - 40%;
2022 - 50%;
2023 - 50%.

The results are presented in the Annex 7.

A comparison of the cost of procurement from KR market and from the UNFPA Catalog with the full TG coverage is presented below:



A comparison of the cost of procurement in KR market and from UNFPA Catalog with partial TG coverage is presented below:



3.6. A contraceptive procurement plan, with a gradual increase in state funding to meet the needs of 50% of women from high medical and social risk groups for maternal mortality between 2018 and 2023

When drawing up the 2018 - 2023 contraceptives procurement plan with a gradual increase in state funding, the following were used:

- estimated data for the annual contraceptives requirement of the TG (WRA from the medical and social risk group);
- estimated data to cover 20% - 50% of the TG in soms and US dollars when procuring through a local tender;
- estimated data to cover 20% - 50% of the TG in US dollars in case of contraceptives acquisition through UNFPA Procurement System.

Contraceptives such as IUDs (until 2023) and progestin-only birth control pills (POBCP) (until 2021 inclusively) were not included in the procurement plan through a local tender.

This is due to the fact that, in 2018, IUDs were procured in the amount of 91.000 US dollars using the Sector-Wide Approach financed by the World Bank, Swiss Cooperation Office and German Development Bank. By signing the Memorandum of Understanding between UNFPA and the MoH, 220,000 units of IUD were procured for this amount with a shelf life until 2023 through UNFPA Procurement System. This number of IUDs fully covers the needs of the TG for the next five years.

POBCPs are currently not available in KR market, and there is no pharmaceutical company interested in registering and importing this contraceptive in the country. POBCP may be procured through UNFPA Procurement System, but only if the annual international agreement is signed, according to the Law "On Public Procurement" (No. 72 dated April 3, 2015). The calculations are shown in the table.

Thus, for example, to satisfy the needs and cover 20% of patients with hypertension in case of a local tender, 22,408,078.08 soms or 322,979.16 US dollars will be required. In

case of signing an international agreement and procuring through UNFPA Procurement System, 3 964110.93 soms or 56 655.73 US dollars will be needed.

The data on the amount of the TG are dynamic and can change, thus changes in the needs in contraceptives are also possible according to the LMIS / CHANNEL reporting data and requests submitted by the coordinators.

**Contraceptive procurement plan to meet the needs of 20% -50% of women from TG
between 2018 to 2023**

Types of contraceptives	Annual requirement of the TG in contraceptives	Incomplete coverage in KR market in KR soms	Incomplete coverage in KR market in US dollars	Year of the procurement plan adjustment	Incomplete coverage from UNFPA Catalog + 20% for logistics in US dollars
2019 - 20% coverage					
POIC	38752	1,989,144.97	28,497.78	2019	29,018.18
POBCP	32,580	-	1946,52		1,946.52
COC	100732	13,723,636.23	196,613.70		5,036.64
Condoms	2573609	6,695,296.88	95,921.16		11,211.77
TOTAL		22 408078,08	322 979,16		56 655,73
2020 - 30% coverage					
POIC	38939	2,996,429.87	42,502.55	2019	43,712.72
POBCP	32,737	-	2932,22		2,932.22
COC	101218	20,673,160.65	293,236.32		7,554.96
Condoms	2586035	10,085,734.26	143,060.06		16,889.31
TOTAL		33 755324,78	481 731,15		85 307,05
2021 - 40% coverage					
POIC	39,295.	4,014,529.23	56,383.84	2020	58,565.02
POBCP	33,036	-	3,928.50		3,928.50
COC	102,143	27,697,296.85	389,006.98		10,121.91
Condoms	2,609,664	13,512,572.19	189,783.32		22,627.81
TOTAL		45 224398,27	639 102,64		114 291,89
2022 - 50% coverage					
POIC	39,620	5,064,013.39	70,837.75	2021	73,875.17
POBCP	33,310	354,256.14	4,955.50		4,955.50
COC	102,989	34,937,965.07	488,728.31		12,873.70
Condoms	2,631,269	17,045,048.76	238,433.97		28,543.21
TOTAL		57 401283,36	802 955,53		144 297,09
2023 - 50% coverage					
POIC	39,970	5,105,938.20	71,385.96	2022	74,486.78
POBCP	33,604	357,380.38	4,996.52		4,996.52
COC	103,897	35,227,215.42	492,510.61		12,987.29
Condoms	2,654,486	17,186,164.19	240,279.23		28,779.51
TOTAL		57 876698,19	809 172,33		145 500,14

3.7. Contraceptive procurement mechanisms

The intrastate program (within the framework of the National Program) or MoH KR usually determines which contraceptives and FP MD for women of the medical and social group should be procured to support relevant programs aimed at reducing maternal mortality, preventing unwanted pregnancy and abortions.

Changes in the coverage, accuracy of target groups of vulnerable women and other specific program goals will affect what products should be procured, as well as the amount and conditions for procurement.

The goals of fulfilling orders and serving the WRA from the medical and social risk group may vary for different goods or categories. The Supply Chain Manager will need to make changes to these parameters when determining appropriate stock levels.

Segmentation of patients or types of contraceptives: Classification of contraceptives, acceptability categories of contraceptives usage and patients should be reviewed and revised periodically to reflect the current or planned prioritization.

DDS&MD has the latest information on requirements for:

- Contraceptive registration (including categories requiring registration, registration of the expiration date or presentation prior to approval)
- Quality: there must be international pre-qualification and potential testing of contraceptives, as well as medical devices (implants, IUDs, caps, diaphragms, etc.)
- Import requirements

Understanding these requirements is crucial, as they must be in accordance with the technical requirements of the tender.

Certain procurement difficulties

Given the scale, high level and cost of procurements, the nature of the goods, number of stakeholders, or strict rules of public procurement procedures, problems often arise in the procurement process. Although a wide range of issues can affect procurement, the most common and critical procurement issues are related to the following:

Reliability of the contraceptive quality

Fake and substandard products exist in the market creating significant product quality risks from the supply system. To mitigate this risk, the public sector procurement processes and national regulatory authorities must introduce appropriate quality assurance measures to ensure that only good quality products enter the supply chain. Procurements consider this responsibility in accordance with technical conditions specified in the tender documents, which determines the main product quality

requirements, such as product certification, pharmacopeia standards (if applicable), labeling and packaging requirements, shelf life requirements, and so on.

Transparency, equity and fairness in the procurement process

MoH KR procurement unit should support an open procurement process by consistently applying relevant procurement rules and procedures, as well as best international procurement practices that promote transparency and accountability.

Design and evaluation

Cost projections and lead times are often difficult to predict. MoH KR procurement unit or the contraceptive procurement working group approved by MoH KR Order should know the main market trends, although it cannot readily collect tender-related information before the publication of the tender document and receipt of proposals.

Understanding procurement context

Procurement activities should be carried out in line with the overall National Health Program and the supply chain. Procurement is one part of the logistics cycle linked with many problems and stakeholders. To better align procurement activities with the objectives of the overall health program and supply chain strategy, the procurement unit should consider the following:

- Information on the National Program related to mothers and children protection, including FP and reproductive health: goals, objectives
- How procurement activities are aligned with other elements of the logistics cycle

The study of the supply and demand market by the MoH KR

To develop a procurement strategy, the procurement unit or the contraceptives procurement work group has to develop a good understanding of the market, covering the following areas:

- Market structure: for contraceptives (types, expiration date of contraceptives, demand) What is the size of the contraceptives market? How many suppliers are there on the market of contraceptives? What are their capabilities (production, capacity, market share)? Where are the suppliers located? What is the degree of market concentration? What are the market trends?
- Competition: What are the competition criteria (price, quality, service, etc.)? What are the barriers to entry? What are the main competitive advantages?
- Supply chain: How complex is the supply chain from raw materials to the final product? How stable is this chain, what are the difficulties and disadvantages?

- **Contraceptive products:** Are there alternatives of one kind or another or suppliers? What is the degree of product differentiation? In particular, for medical goods, are there branded (patented) products or general contraceptive products? Are there any quality standards for product segmentation?
- **Patient value:** What is the share and attractiveness of the contraceptives procurement market for patients? Which contraceptives are most procured by patients, which are well prescribed by the MHIF Additional Drug Package Program? What contraceptives are in demand by patients?
- **Prices:** Contributions to pricing are important, especially for budgeting purposes. The procurement unit, together with the Health Care and Drug Policy Management, can examine prices using reference prices in pharmacies for all regions, issuance of prescriptions and the reimbursement amount on the MHIF Additional Drug Package Program and existing relations with market players other than suppliers. Even if the procurement has an existing relationship with suppliers, due to the transparency and fairness requirements in public procurement, they should refrain from directly accessing these suppliers before and during the bidding period until the contract is awarded.

Contraceptives procurement scheduling

Procurement is often a lengthy process, with many steps and stakeholders involved at every stage. It is necessary to develop, update and finalize a full schedule of work with stakeholders (internal and external) in order to ensure effective integration in the entire supply chain, plan and maintain a contraceptives procurement cycle, avoid shortages and manage stakeholder expectations. For example, the some of the stakeholders are vulnerable female groups themselves, civilian sector, and development partners.

MoH KR's initial public procurement steps should cover at least the following: main activities and stages (for example, specifications development, tender advertising, applications evaluation, contract signing, product availability, transit, and so on); estimated dates; names of responsible parties for each activity. The contraceptives supply plan, resulted from the quantitative assessment, provide important results for the contraceptives procurement plan and timing. Procurement activities should be started 12-24 months prior to the actual date when the contraceptives needed, and the deadlines should be regularly updated. This process also ensures that all activities are accounted for to ensure that relevant contraceptives arrive in the right amount, at the right time, in the right condition, at the right price and to the right place.

Step-by-step public procurement (tender) sequence

Each MoH KR public procurement step is standardized and based on full documentation and transparency throughout the process. This ensures that the whole process is fair and competitive so that stakeholders are involved and agree when necessary. It is imperative to effectively manage the contraceptives procurement process to ensure that the procedures are followed and that the process is well documented. An open and

transparent process will increase competition and fairness while reducing the risk of complains from applicants.

The main stages of procurement are fixed in the graph below. Picture. **Sequence**



Documents for the tender

For effective competitive procurement, it is important that the tender document details the following:

- General procurement information and context
- Number of requested contraceptives or MD divided into groups by FP methods
- Technical characteristics of contraceptives
- Quality assurance requirements for contraceptives
- Delivery dates
- Commercial terms and required location of shipment
- Instructions, application forms and templates, if applicable
- Evaluation criteria and method that will be used to evaluate and select suppliers
- General terms of delivery
- Specific terms and conditions of the supplier

Tender document must be publicly advertised on the government orders website <http://zakupki.gov.kg/popp/home.xhtml> (it can also be found on MoH KR website or newspapers and local bulletin boards). Additionally, the MoH procurement unit can send invitations in a single electronic file in a single email directly to all suppliers who would want to bid.

Evaluation criteria and methods

The bids evaluation process in accordance with the established MoH KR evaluation method and criteria in order to obtain the best value for the organization. This process should be conducted in a fair and transparent manner to ensure equal treatment of all participants in the procedures. Evaluation of the bids received should be based on the evaluation criteria and method specified in the tender document.

The main stages of evaluation are listed below:

Responsiveness of the bid: this stage assesses whether the bid has been completed (all necessary documents and information has been provided), has been submitted on time and complies with the instructions set out in the tender document.

Technical review: at this stage, the bid is evaluated for each technical requirement specified in the tender document. Bids that do not meet the technical requirements must be rejected and no longer considered.

Business review: proposed cost evaluation. Depending on the procurement, the business review considers only the price proposed or uses a more general approach to costs.

The main evaluation methods are:

- Each MoH KR contraceptive procurement bid is examined for compliance with each requirement criteria in the tender document. Bids that meet all requirements are considered compatible; all non-compliant bids should not be considered further. Compliant bids are compared by price. A competitive bid with the lowest cost is the winning bid.
- The same method can be used with a hierarchical list of key requirements based on the procurement context (for example, DDS&MD registration of the contraceptives in KR, presence in EML or the lead-time).
- Each bid is evaluated or scaled for each requirement and at a proposed price. The winning bid is the one with the highest technical score and lowest cost, or with the highest aggregate technical and business score.

Total cost and best value

Too often, the lowest cost is considered the most important criterion for choosing a provider, while the success of the FP program to eliminate unwanted pregnancies and reduce maternal mortality, specifically among vulnerable groups of the female population, and relies on the choice of a provider who can deliver quality contraceptives within the required period to achieve the best value. For contraceptives and MD procurement for the public sector within MoH KR, the following minimum requirements should be included in the total cost calculation:

- The contraceptives procurement price
- The cost of delivery and insurance to the destination at DDS&MD KR
- Costs of customs clearance
- Storage costs during transit to the destination at DDS&MD KR.

Additionally, the working group on procurement of medical equipment and medical devices grouped by FP methods must evaluate the rates using the adequate approach. Again, the best-cost approach can be a difficult type of assessment. However, in the case of health products in addition to technical requirements and price, the supplier's reliability must be considered based on the following:

- Quality medicine (EML or WHO prequalification)
- Basic requirements, such as registration and pre-shipment inspection
- Delivery schedule

- Any risks (delayed delivery, wrong technical specifications, retendering, volume or amount of contraceptives procurement)

This approach should be described in the tender document.

Contract signing

A contract is the result of the bidding process for contraceptives grouped by type of FM planning and MD procurement. This is a document that legally binds the buyer in the person of MoH KR and the supplier with an agreed set of obligations undertaken according to the tender document, bid and subsequent communications, negotiations and agreements between the parties.

Contract monitoring and execution

Contract monitoring is necessary to ensure that the supplier ultimately fulfills its obligations so that contraceptives and MD by FP methods arrive timely and in good condition. The contracts management and monitoring system for medical equipment and MD procurement should include:

- Timing in delivery of contraceptives and MD grouped by FP methods
- Preliminary inspection of documents
- Verification of delivery confirmation, which records the delivery of contraceptives and MD grouped by FP methods, receipt confirmation and good condition of contraceptives and MD grouped by FP types.
- Procedures for resolving issues or disputes.

Risk management

Risk management is a way for working group on procurement of the contraceptives and MD grouped by FP methods, to anticipate, avoid and reduce the negative impact that may arise as a result of events occurring during procurement. Additionally, procurement itself is exposed to specific risks of two main categories:

Technical risks. Typical technical risks are technical inconsistencies, quality problems. They are mainly mitigated in technical specifications of the tender document.

Commercial risks. Typical commercial risks are the financial ability of the supplier, ability to fulfill the contract (within the term, at the agreed price, etc.). They are mainly mitigated through the tender document requirements (characteristics related to past experience and financial statements) and in contractual terms (with clauses such as liquidated losses, proposals for price changes, termination clauses).

Procurement planning

Choice of procurement method and type of contract

Depending on the cost of procurement or the nature of contraceptives and MD by FP methods that should be procured, the main procurement methods are as follows:

- 1) The most common is single-stage - the number of suppliers for contraceptives procurement who wish to participate in the procurement procedures is not limited.
- 2) Two-stage is procurement in two stages (1 - without price and 2 - with prices) for the contraceptives to be procured.
- 3) Simplified - to ensure competition and effective selection, the procuring entity considers bids of goods, works and services from at least two suppliers. Each supplier is allowed to submit only one application to the contraceptives tender and is not allowed to change it. No negotiations are conducted between the procuring entity and supplier regarding the bid submitted by this supplier. The winning bid is the one that is considered to be acceptable with the lowest price, satisfying the needs of the procuring entity.
- 4) Reversed auction - through the real-time public procurement web portal, where the procuring entity sets the initial price that it is ready to pay for the product or service, and the suppliers make their price offers, gradually lowering the price level;
- 5) Direct contracting - only one supplier is invited to participate in the tender. This occurs when only one source can provide the requested contraceptives. In this case, it is important that the procurement unit carefully document the rationale for the single source procurement.

In the case of contraceptives and MD procurement for FP through UNFPA, the state will save costs to the republican budget. It is assumed that, in Kyrgyzstan, UNFPA can procure contraceptives or MD by FP methods by direct contracting to assist in the implementation of state health programs. These international organizations do not pursue commercial objectives.

UNFPA will only procure certified contraceptives or MD by FP methods and have experience in delivering them using the cold chain (a special storage and packaging regime). UN organizations can supply contraceptives or MD by FP methods according to acceptable quality standards that have passed WHO prequalification and according to the approved EML. WHO prequalification program is based on international pharmaceutical standards for medicines quality, safety and efficacy.

All procurements by MoH KR and institutions subordinate to MoH KR are carried out in accordance with the Law on Public Procurement, with the exception of procurements using funds from grants and loans received under international agreements signed by KR and ratified by the Parliament. In these cases, procurements can be done according to the donors' procedure, if required by the agreements. But it should be borne in mind that agreements must be signed every year (Law No. 72 dated April 3, 2015 "On Public Procurement" (revised in accordance with KR Laws (1) No. 182 dated November 18, 2016, (2) No. 195 dated December 10, 2016, (3) No. 25 dated February 14, 2017 and (4) No. 93 dated May 30, 2017).

The following public procurement scheme is proposed:

- 1) If there is an agreement (contract, memorandum) between KR Government or MoH KR procuring entity by signing direct contract for procurement of contraceptives or MD by FP methods;
- 2) International organization UNFPA commits itself to assist in conducting joint monitoring of prices from manufacturers and provides the most suitable procurement option to the procuring entity (MoH KR), taking into account the price and quality, as well as possible delivery costs;
- 3) With the consent of the procuring entity (MoH KR), the international organization procures and delivers the goods to the country;
- 4) The procuring entity (MoH KR) publishes information on the public procurement portal on how much was procured from which supplier and at what price (requirements of Article 21 of KR Law on Public Procurement).

At the same time, UNFPA is entitled to provide technical support for training in FP methods and related services in the contract: chartering, storage.

4. STORAGE, DISTRIBUTION AND USE OF CONTRACEPTIVES ON THE BASIS OF LMIS, CHANNEL

4.1. Contraceptives storage and warehousing rules

Storage of medicines (medications) and MD (MDs), including contraceptives, is carried out in accordance with the Technical Regulation "On the Safety of MD" approved by Government Resolution No. 74 dated February 1, 2012, and "On Safe Storage of Medicines in Pharmaceutical Organizations and Health Organizations, and the Sanitary Regime of Pharmaceutical Organizations" No. 646 of September 25, 2012.

General safety requirements for the storage of medicines and MD

The technical regulation establishes safety requirements for the organization of storage of various groups of medicines and MD in pharmaceutical organizations and HOs.

Safety requirements for the arrangement and operation of facilities for medicines (medications) and MD (MDs) storage:

- In accordance with established standards and current regulatory and technical documentation, storage facilities must: ensure the safety of medicines and MD; be equipped with security and firefighting equipment and mechanical supply and exhaust ventilation.

- If it is impossible to equip the storage facilities with ventilation, it is recommended to install windows, transoms, second lattice doors, etc.
- A certain temperature and humidity should be maintained in storage facilities, which should be checked at least once a day. To monitor these parameters, warehouses should be provided with thermometers and hygrometers fixed on the internal walls of the storage, away from heating appliances, at a height of 1.5-1.7 m from the floor and at a distance of at least 3 meters from the doors. Temperature sensitivity or other special handling: Contraceptives requiring special storage, such as cold chain products, may need to be planned and managed separately from all other products. DDS&MD warehouses will comply with the requirements and contraceptives storage.
- Warehouses are equipped with central heating appliances. It is not allowed to heat the facilities with open flame gas appliances or open coil electric heaters.
- In warehouses located in a climatic zone with large deviations from permissible temperature and relative humidity levels, storage facilities should be equipped with air conditioners.
- Storage facilities must be provided with the necessary number of racks, cabinets, pallets, shelf stands, etc.
- Racks are installed in such a way that they are at a distance of 0.6-0.7 m from the external walls, at least 0.5 m from the ceiling and at least 0.25 m from the floor. With respect to the windows, racks should be located so that walkways are illuminated, and the distance between the racks is at least 0.75 m and provides free access to the goods.
- Storage facilities should be kept clean; the floors of the facilities should be wet-cleaned at least once a day using authorized detergents.

General requirements for the organization of storage of medicines and MD:

- Medicines and MD must be placed in storage facilities taking into account the most complete use of the area, creation of best working conditions, possibility of using mechanization equipment and ensuring pharmaceutical order.
- Medicines and MD should be placed on racks, in cabinets, and, if necessary, on the floor, after having placed a pallet first, shelf stand, special plate, etc.
- **Under no circumstances should medicines and MD be placed directly on the floor and near heating appliances with an open spiral!**
- In storage facilities, contraceptives are placed separately:
 - depending on the variety (rubber devices; plastic products; combined oral

contraceptives, progestin-only contraceptives, etc.) and taking into account the nature of various forms (oral and injectable) of contraceptives;

- taking into account the established storage periods for medicines with limited shelf life.

- During storage, continuous visual monitoring of the condition of the container, external changes in the medicine and medical device should be carried out at least once a month. If the container is damaged, it is mandatory to eliminate its defects or transfer the contents to another container.
- Proper storage includes efficient use of the storage space for contraceptives. If contraceptives and MD by FP methods are crowded into too small a space in the storage facilities of DDS&MD and at the HO, they can be damaged, because it is more difficult to follow storage procedures. Therefore, supply chain managers must learn how to calculate the space needed to optimally manage the overall flow of contraceptives to and from the warehouses, and how this space will be used for internal warehouse operations. Planning is not only to estimate storage space requirements, but also to determine how this space should be organized to facilitate identification of warehouse activities.
- In storage facilities, as well as in the warehouse territory, it is necessary to systematically carry out measures to control rodents, insects and other pests.

Safety requirements for storage of medicines and MD:

Storage Procedures	Why are these procedures so important?
Always clean and disinfected storage	Rodents and insects (such as termites) can contaminate contraceptives and their packaging. If you clean and disinfect your storage, then pests are less attracted to storage areas. Also, a regular extermination schedule will help eliminate pests
Store contraceptives in a dry, well-lit, well-ventilated facility in a dark place	<p>Extreme heat and exposure to direct sunlight can worsen the condition of products and essential medicines and significantly reduce shelf life.</p> <p>If the warehouse temperature rises above 104 degrees Fahrenheit (40° C), latex in condoms, for example, may begin to break down. With prolonged exposure to high temperature, condoms may expire long before the specified time.</p> <p>For the best preservation of rubber devices in storage facilities, it is necessary to create:</p> <ul style="list-style-type: none"> - protection from light, especially direct sunlight, high (over 20° C) and low (below 0°) air temperature; fluid air (drafts, mechanical ventilation); mechanical damage (squeezing, bending, twisting, pulling, etc.); - to prevent drying, deformation and loss of elasticity

	<p>— relative humidity of at least 65%;</p> <p>- insulation from aggressive substances (iodine, chloroform, ammonium chloride, lysol, formalin, acids, organic solvents, lubricating oils and alkalis, chloramine B, naphthalene);</p> <p>Direct sunlight is also dangerous because ultraviolet rays can damage oral contraceptives and packaging in addition to raising the product temperature. To avoid this, store contraceptives in the original portable boxes and obscure the interior of the vault from sunlight. At lower levels, store the contraceptives in the inner boxes. Hormonal contraceptives should be stored at room (18°-20° C), cool (or cold) - (12°-15°C) temperature.</p> <p>Injection dosage forms should be stored in a cool, dark place, in a separate cabinet or in an insulated room and taking into account the particular packaging (fragility), unless otherwise indicated on the packaging. Ampoules and vials are preferably placed in an upright position.</p> <p>To maintain high humidity in dry facilities, it is recommended to place vessels with water, where a 2% aqueous solution of carbolic acid is added to disinfect water</p>
Safe storage against water ingress	<p>Water can destroy inventory and its packaging. Even if the contraceptive itself and MD grouped by FP methods are not damaged by water, the damaged packaging makes the product unacceptable to women, especially vulnerable groups of population, which are provided free of charge by the State. Constantly repair roofs and windows. To avoid water damage from moisture that seeps through walls and floors, place objects on pallets at least 10 cm high from the floor and 30 cm from the walls</p>
Make sure the fire safety equipment is available and the personnel trained to use it	<p>Extinguishing a fire before it spreads can save thousands of dollars in supply and storage. Fire safety equipment should be accessible. Place appropriate, refilled fire extinguishers throughout the warehouse (especially near the doors) and train the HO staff in using the existing fire safety equipment</p>
Keep condoms and other latex products away from electric motors and fluorescent tubes	<p>Latex products such as condoms can be damaged if they are directly exposed to fluorescent lamps and electric motors. Electric motors and fluorescent tubes create a chemical called ozone, which can quickly degrade condoms. Condoms stored in their proper packaging will not be affected by the limited exposure to ozone. If possible, keep condoms in paper boxes away from heaters (at least 1 m away). If this is not possible, move them away from light sources and motors.</p>

	<p>Plastic products should be stored in a ventilated, dark room, at a distance of at least 1 m from heating systems. The facility should not have open flames, vapors of volatile substances. Electrical appliances, fittings and circuit breakers must be manufactured with an anti-spark, (fireproof) design</p>
Store flammable products separately from other products. Take appropriate precautions	<p>Some medical procedures use flammable products. Keep these flammable contraceptives (condoms, candles, diaphragms) away from other products and near a fire extinguisher</p>
Place boxes sized at least 10 cm from the floor, at a distance of 30 cm from walls and other stacks, and no more than 2.5 m	<p>Pallets protect contraceptives from the floor below, therefore the contraceptives are less susceptible to pests, water and pollution. By placing pallets at a distance of 30 cm from the walls and from each other, you improve air circulation and facilitate the movement of inventory, cleaning and inspection. For DDS&MD, pallets are often more efficient than racks for product storage. Pallets reduce the amount of unpacking for storage and repackaging for delivery, cheaper in construction, can be kept using shelving and store more inventory in the limited area they occupy. Stacking the contraceptives at a stable height of less than 2.5 m reduces the likelihood of injury to warehouse personnel. At lower levels, where pallets are inappropriate, shelving is a great way to store medicines. Metal shelving is preferable because wood shelving can attract termites. Cabinets for storing of medical rubber devices and parapharmaceutical products of this group should have tightly closing doors. Inside, the cabinets should have a completely smooth surface</p>
Position the boxes with the arrows pointing up. Make sure the identification tags, expiration dates, and production dates are clearly visible	<p>All finished medicines (all contraceptives arrive in KR and are distributed ready-made) should be stacked and placed on shelves in the original packaging with the label (marking) facing out.</p> <p>A rack card is attached to racks, shelves, cabinets, which indicates the medicine's name, series, expiration date, quantity. As contraceptives arrive, the rack card must be updated.</p> <p>If the shipping boxes do not indicate the manufacturing or expiration dates, or if this information is difficult to read, use a marker to write the dates on the cardboard boxes in large, easy to read letters and numbers. Contraceptives and MD should always be stored in accordance with the manufacturer's instructions on the box</p>

Keep materials available for the “first in expiration date - first in use” method	In addition to having expiration or production dates visible, store contraceptives so that the contraceptives nearing their end-of-life are used first before they expire. MD are also placed in storage facilities by names and expiration dates. Each batch of MD has a label attached indicating the name and expiration date.
Separately and regularly dispose of damaged or expired contraceptives	Expired contraceptives is a costly mistake. Medical centers (or, even worse, clients) will not only receive unusable contraceptives, but also money and resources for transportation, storage and disposal are wasted. To avoid this, separate a part of the warehouse for damaged and expired goods. If possible, plan their destruction regularly. Check the rules for destruction.

Common problems with the quality of goods during storage

	Step	What Does It Tell Us
1.	Start by calculating the number of contraceptives units expected to be received in one batch, or start with the maximum quantity that you expect to store, if you calculate the total storage requirements for the warehouse	Most batches of contraceptives are expressed in units. You need the number of units that is expected to show you the total amount of goods that you must put in inventory (or at local tender described or at procurement through UNFPA - copy of invoice)
2.	Distribute the number of units of goods that will be stored in one cardboard box	This indicates the number of cardboard boxes. Sometimes the documents indicate the number of cardboard boxes when loading for shipment
3.	Multiply the number of cardboard boxes by their volume	You need to know the volume of one box. Obtain this information from the supplier
4.	Divide the total volume by 2.5 m	Regardless of the size of the cardboard boxes, you should not stack them higher than 2.5 m. Divide the volume by the maximum height to determine the area needed to store the product
5.	Multiply the required floor space for storing the boxes by two	A double volume of space allows to use the space, walkways and other areas
6.	Calculate the square root to obtain the dimensions of the total volume of the required area. You can also estimate the sizes using your math knowledge	The result is the dimensions of the space necessary, if we assume that the space is square. Of course, many warehouses are not square, for example, 36 square meters is a square of 6 m x 6 m. It can also be an area of 9 m x 4 m
7.	Repeat these calculations for all types of contraceptives to determine the total amount of storage space you need	You can calculate steps 1-6 for each product separately to estimate the area required. If you only need to know the total space requirements for the store, follow steps 1-3

		above for each product, then summarize all the column requirements and follow steps 4-6 for this total
--	--	--

Requirements for medicines and MD transportation and tare.

- Medicines and MD should be stored and transported in primary, secondary, group tares specified in the current regulatory documents for medicines and MD, as well as tare, packaging, closures and the procedure for their use.
- In the case of industrial product repackaging, medicines and MD packaged in primary packaging made of polymer films or paper must first be assembled into groups that must be packed in secondary packaging that protects against interactions with moisture, vapor or gas with the atmosphere (package made of a polymer film or combined materials, a cardboard box with an internal polyethylene coating, etc.). Volatile, odorous, poisonous medicines should be packed in no more than one name in one shipping tare (casing, box, drum, etc.).
- All types of primary tare and packaging must be sealed by using an appropriate set of closures (a screw cap with a gasket or cork, tension cap, cork, roll able metal cap with cork) or sealless methods: heat sealing (polymeric and composite materials), gluing (cellophane, paper, cardboard), etc.
- Medicines and MD are transported in closed vehicles and containers. The tare must protect the packaged medicines from the effects of precipitation and dust, solar radiation, mechanical damage.
- If there is no regulatory documents for tare, packaging or closing for medicines and MD or if there are conflicting directions, the choice of tare, packaging and closing should be guided by the requirements of the Technical Regulations.

Compliance assessment of medicine and MD storage

- An assessment of the compliance of the medicines and MD storage process at pharmaceutical organizations and HOs and compliance of pharmaceutical organizations with the sanitary regime requirements of the Technical Regulations is carried out in the form of state supervision and control.
- State supervision of compliance with the requirements established by the Technical Regulations in pharmaceutical organizations and HOs is carried out by the authorized state agency in the field of healthcare responsible for the turnover of medicines in KR and includes verification of:
 - arrangement and operation of medicines and MD storage facilities for compliance with the requirements of the Technical Regulations;
 - the process of medicines and MD storage organization in accordance with the

requirements of the medicines and MD manufacturers' conditions of storage indicated on the primary and secondary (consumer) packaging or in accordance with the approved Instructions for use enclosed in the secondary packaging of each name of the medicine;

- the process of storage organization and technical resistance of the storing facilities for strong, highly toxic and toxic medicines and MD, as well as flammable and explosive medicines and MD;
 - compliance with safety requirements for the sanitary regime of pharmaceutical organizations and healthcare organizations.
- State inspectors conduct:
 - activities for state control and supervision on issues within their competence;
 - measures to preclude and prevent the storage of medicines and MD that do not meet safety requirements, in accordance with the Technical Regulations;
 - measures to suppress and prevent violations of the sanitary safety regime of pharmacy institutions that do not meet safety requirements, in accordance with the Technical Regulations.
 - The objects of state supervision and control are medicines and MD, storage processes and compliance with the sanitary regime, which are covered by the Technical Regulations.
 - The authorized state body in the field of health and circulation of medicines, within its competence and in accordance with KR legislation, has the right to:
 - access medicines and MD storage facilities of pharmaceutical organizations regardless of the ownership form or departmental affiliation;
 - inspect medicines and MD storage facilities;
 - verify compliance with the requirements of these Technical Regulations by pharmaceutical organizations;
 - upon detection of significant discrepancies with safety requirements that pose a consumer health risk, take actions and measures in accordance with KR legislation.
 - The procedure for exercising state supervision is determined in accordance with the Law of Kyrgyz Republic.
 - Compliance assessment in the form of control is carried out during the process of obtaining purified water and water for injections.

Persons who violate the requirements of these Technical Regulations are liable in

accordance with KR legislation.

4.2. Contraceptives distribution and usage based on LMIS, CHANNEL

The contraceptives received are stored at the DSD&MD warehouse. Based on the needs and request of the heads of oblast HOs (FP coordinators), the MoH KR commission on contraceptives distribution prepares a schedule for issuing the contraceptives to the oblast level, which is approved by the Order of the MoH KR. The request of the oblast FP coordinators is compiled based on the the average monthly consumption and level of minimum/maximum contraceptives in stock for the medical and social risk group and the LMIS data. Further, based on the approved distribution plan, DSD&MD specialists issue contraceptives from the warehouse to the Oblast Human Reproduction Centers and Oblast FMC.

At the oblast level, local OHRC and OFMC commissions on contraceptives distribution prepare the orders for issuing contraceptives to the level of the FMC, GPC. Based on these orders the pharmacy warehouse specialists of the oblast HOs issue the contraceptives to the FMC, GPC, taking into account their requests and LMIS data about WRA from the medical and social risk group.

Additionally there are contraceptives distribution commissions established in healthcare organizations. They distribute contraceptives to the level of FMP, FOP, taking into account LMIS data. The contraceptives are issued to the FMC, GPC from the pharmacy warehouses based on the invoice using the "CHANNEL" SW to FP Rooms, FGPs, FOPs.

The contraceptives issuance is also recorded in the contraceptives-using patient's card and in the contraceptives movement journal (Form 040/u) in accordance with MoH KR Order No. 170 dated April 8, 2015.

5. MONITORING AND EVALUATION

Monitoring is a periodic process of gathering information in order to determine whether the programs (processes) are implemented effectively at various levels, what changes occur and what costs are associated with these processes.

Its regular implementation (monthly, quarterly, annual) will allow the governing agencies to improve the process of strategic decision-making and adjust their policies in case of errors, various restrictions, etc.

The objective of monitoring is to track changes that occur in the resources, process and final results over time, by keeping accounts, creating a regular reporting system, and conducting research among health services providers and recipients.

Events that have shown their efficacy can be reproduced in the framework of new programs, whereas the actions with least success may be revised in the future. For

maximum efficacy, the assessment procedure should be provided for at the very initial stage of monitoring. In the context of budget constraints, assessment results indicate a more rational use of limited human and financial resources in order to achieve the desired results.

Evaluation can be defined as a set of measures aimed at determining the value of the quantitative and qualitative result of the implemented program. Thus, the evaluation involves establishing of a relationship between the final or intermediate outcomes and the actions performed.

MoH KR, DDS&MD, UNFPA, other decision-makers and those interested in solving health problems are to organize monitoring.

Three main phases, or evaluation levels, can be distinguished: resources (structure) evaluation, process evaluation, result evaluation.

The following “key” indicators for evaluation are proposed:

1. Resources (structure) indicators:

1.1. A multi-year plan for state contraceptives supplies to meet the needs of women from high medical and social risk groups for maternal mortality

Target: presence of a multi-year plan in the country

Data Collection Source: MoH

1.2. State funding for contraceptives procurement to meet the needs of women from the groups with high medical and social risks for maternal mortality

Target: presence of state funding based on a 5-year plan

Data Collection Source: financial policy department reporting data

1.3. Technical specifications for contraceptives procurement are designed with the consideration of safety and efficacy aspects.

Target: the contraceptives procured must meet the required criteria

Data Collection Source: technical specifications

1.4. Good practice for contraceptives / FP reporting by HO managers (health workers)

Target: PC / obstetric care managers (health workers) should be able to report correctly.

Data Collection Source: HO reports

1.5. HO managers (health workers) correctly determine the current levels of the contraceptives in stock and calculate the need in contraceptives.

Target: availability of the current contraceptives inventory in the HO
Data Collection Source: HO reports

1.6. The share of HOs in which information is available on the number of WRA from the medical and social risk group

Target: in each HO, there should be information on the number of WRA from the medical and social risk group, which should be reviewed periodically (at least once a year).

Data Collection Source: assigned population census register, HO report
Data Collection Frequency: annually

1.7. The share of HOs in which the CHANNEL SW is used to manage contraceptives in stock.

Target: in each HO, the CHANNEL SW system should be used
Data Collection Source: HO report
Data Collection Frequency: annually

2. Process indicators

2.1. Percentage of state funds absorption for contraceptives procurement

Target: state funds allocated for procurement of contraceptives must be fully used.
Data Collection Source: financial policy department reporting data

2.2. The number of WRA from the medical and social risk group using contraceptives

Target: at least 85% of WRA from the medical and social risk group should be covered by contraception
Data Collection Source: HO report, out-patient patient record card, Journal
Data Collection Frequency: once a year

2.3. The number of WRA from the medical and social risk group using contraceptives for 1 (2) years

Target: WRA from the medical and social risk group should be covered by contraceptives for 1 (2) years.
Data Collection Source: assigned population census register, HO report
Data Collection Frequency: once a year

2.4. The share of client medical records in which contraceptives issuance records match the records in the Journal of contraceptives movement accounting

Target: 100% matching between client medical charts and contraceptives movement accounting records

Data Collection Source: contraceptives movement journal, patient medical chart (Form)

Data Collection Frequency: once in 6 months

2.5. Percentage of MHI-insured women outside of the medical and social risk group, for whom a contraceptives prescription was issued

Target: MHI-insured women outside of the medical and social risk group should receive contraceptives based on subsidized prescription.

Data Collection Source: assigned population census journal, HO report, CIF

Data Collection Frequency: once in 6 months

3. Result indicators

3.1. Clients from the medical and social risk group should be informed about the possibility of contraceptives procurement for free or based on subsidized prescriptions

Target: 100% information coverage of clients from the medical and social risk group

Data Collection Source: polling clients from the medical and social group by using questionnaires

Data Collection Frequency: once in 6 months

3.2. Percentage of contraceptives procurement from the volume planned

Target: 100% contraceptives procurement according to the plan

Data Collection Source: MoH reports

3.3. Customer satisfaction with the quality of FP health services

Target: customer satisfaction with FP health services should be 4 points or more (on a 5-point system)

Data Collection Source: customer survey

Data Collection Frequency: once in 6 months

CONCLUSIONS AND RECOMMENDATIONS

Conclusions	Recommendations	Performers
<p>Access to contraceptives is limited for persons from the medical and social risk group</p> <ul style="list-style-type: none"> - Lack of continual state funding for contraceptives procurement - Lack of a mechanism for public procurement of contraceptives and lack of humanitarian contraceptives supplies - Limited choice of contraceptives in KR pharmaceutical market - Limited list in EML and MHIADPP - Shortage of personnel in the field, including trained workers - Health workers do not know modern long-term contraception methods (implants) 	<ul style="list-style-type: none"> - Provide funds for contraceptives procurement on a long-term basis in the country's budget - Introduce a mechanism developed for public procurement of contraceptives - Conduct advocacy activities with pharmaceutical companies for the contraceptives registration and supply to KR market - Initiate introduction of additional contraceptives to EML - Expand the possibility of distance learning of FP health workers - Conduct practical seminars on postpartum and post abortion IUD insertion. Provide for training on modern long-term contraception methods with international experts with donors' technical support 	<p>Government, MoH KR, MF KR</p> <p>MoH KR, MoH KR</p> <p>MoH KR, MS&MTD</p> <p>MoH KR, MHIF, DDS&MD</p> <p>KSMIPE, professional associations, international donors</p> <p>MoH KR, KSMIPE, professional associations, international donors</p>
<p>The cost of contraceptives in UNFPA Catalog is 6.7 times cheaper compared to prices in KR pharmaceutical market.</p> <p>Inability to procure contraceptives through UNFPA Procurement System in accordance with KR legislation</p>	<p>Carry out advocacy activities to amend KR legislation to enable contraceptives procurement by UN donor organizations</p>	<p>MoH KR, professional organizations, NGOs</p>

ANNEXES

Calculations of the contraceptives requirement at the beginning of 2018

I. Medical risk group	Number of persons from the risk group	% of people using contraception method					Number of persons from the risk group using contraceptives method					Annual contraceptives requirement				
		IUD	POC		COC	Con doms	IUD	POC		COC	Con doms	* IUD	POC		COC	Con doms
			POIC	POBCP				POIC	POBCP				POIC	POBCP		
Epilepsy	2629	70			5	25	1840			131	658	153			1703	78960
Mental disorders	3407	60	30			10	2044	1022		0	341	170	11242		0	40920
Diabetes mellitus (insulin dependent)	1253	50	5	5	5	35	626	63	63	63	438	52	693	693	819	52560
Glomerulonephritis	24	50				50	12	0	0	0	12	1	0	0	0	1440
Coronary heart disease	39	50				50	20	0	0	0	19	2	0	0	0	2280
Hypertension with organ damage	166	50				50	83	0	0	0	83	7	0	0	0	9960
Diabetes insipidus	33	50	5	5	5	35	16	2	2	2	11	1	22	22	26	1320
Respiratory diseases with respiratory failure	6551	35	5	5	25	30	2293	328	328	1637	1965	191	3608	3608	21281	235800
Connective tissue disease	182	50				50	91	0	0	0	91	8	0	0	0	10920
Oncological diseases	3256	70				30	2279	0	0	0	977	190	0	0	0	117240
Aplastic anemia	18	5	5	5	5	80	1	1	1	1	14	0	11	11	13	1680
Cirrhosis	25	30	5	5	0	60	8	1	1	0	15	1	11	11	0	1800
Tuberculosis	960	50	5	5	5	35	480	48	48	48	336	40	528	528	624	40320
HIV AIDS	1093	30	15	5	30	20	328	164	55	328	218	27	1804	605	4264	26160
Alcohol addiction	2340	30	10	5	5	50	702	234	117	117	1170	59	2574	1287	1521	140400
Drug addiction	404	30	10	5	5	50	122	40	20	20	202	10	440	220	260	24240

Total for medical risk group	22380						10945	1903	635	2347	6550	912	20933	6985	30511	786000
-------------------------------------	--------------	--	--	--	--	--	--------------	-------------	------------	-------------	-------------	------------	--------------	-------------	--------------	---------------

* taking into account that the loop is set for 12 years

Data from the «Assigned Population» Database

II. Social risk group	Number of persons from the risk group	% of people using contraception method					Number of persons from the risk group using contraceptives method					Annual contraceptives requirement				
		IUD	POC		COC	Con doms	IUD	POC		COC	Con doms	IUD	POC		COC	Con doms
			POIC	POBCP				POIC	POBCP				POIC	POBCP		
Persons with disabilities since childhood, groups I, II, III	22762	40	5	5	10	40	9105	1138	1138	2276	9105	759	12519	12519	29591	1092576
Children with disabilities (under 18 years old)	7412	2		10	30	58	148	0	741	2224	4299	12	0	8153	28907	515875
Low-income (18-49 years old)	4019	30	10	10	20	30	1206	402	402	804	1206	101	4421	4422	10452	144720
Total for social risk group	34193						10459	1540	2281	5304	14610	872	16940	25094	68949	1753171
Multi-child families	653	45	10	5	10	30	294	65	33	65	196	25	715	363	845	23520
Total for risk groups	34846						10753	1605	2314	5369	14806	885	17655	25457	69794	1776691
Total	57226						21698	3508	2949	7716	21356	1797	38588	32442	100305	2562691

Projection of WRA population

Age groups	2015	2016	2017	2018	2019	2020	2021	2022	2023
15-19	251.030	242.713	2 34.997	229.003	226.372	228.104	233.742	242.986	255.336
20-24	277.871	269.359	261.953	255.153	248.042	240.378	233.476	225.973	219.453
25-29	294.180	296.441	293.095	285.565	276.476	267.679	260.311	252.893	245.561
30-34	213.974	227.789	245.244	263.479	278.010	286.064	289.379	285.939	277.812
35-39	175.976	179.382	183.510	189.037	197.032	207.944	222.512	239.857	257.469
40-44	164.158	164.548	165.362	166.664	168.584	171.274	175.316	179.375	184.464
45-49	158.516	157.409	157.570	158.535	159.513	160.089	161.064	161.823	162.770
Total:	1,535.705	1,573.641	1,541.731	1,547.436	1,554.029	1,561.532	1,575.800	1,588.846	1,560.865

Source: <https://esa.un.org/unpd/wpp/DataQuery/>

The contraceptives requirement by types in 2019-2023

	2018	2019	2020	2021	2022	2023
General population, people	1,547,436	1,554,029	1,561,532	1,575,800	1,588,846	1,602,865
The share of TG in the general population, %	3.70%					
Target group, people	57.226	57.470	57.747	58.275	58.757	59.276
TG growth rate, %		0.43 %	0.48 %	0.91 %	0.83 %	0.88 %
Contraceptives requirement:						
IUD	1,797.00	1,805	1,813	1,830	1,845	1,861
POC / POIC	38.588.00	38.752.41	38.939.51	39.295.31	39.620.63	39.970.22
POC / POBCP	32,442.00	32,580.22	32,737.52	33,036.65	33,310.16	33,604.07
COC	100,305.00	100,732.36	101,218.70	102,143.56	102,989.20	103,897.91
Condoms	2,562,691.00	2,573,609.59	2,586,035.22	2,609,664.29	2,631,269.63	2,654,486.33

Projection of contraceptives procurement for 2019-2023 in KR market with 100% TG coverage (in KR soms)

	2019	2020	2021	2022	2023
IUD	354,381.53	359,460.52	364,782.37	369,601.88	372,861.45
POC / POIC	12,120,490.80	12,294,201.40	12,476,218.43	12,641,054.19	12,752,537.71
POC / POBCP	679,335.48	689,071.70	699,273.48	708,512.28	714,760.77
COC	4,790,679,616.14	4,887,249,563.25	5,008,850,152.61	5,137,705,278.23	5,188,592,425.08
Condoms	33,342,458.70	33,820,322.07	34,321,035.72	34,774,485.15	35,081,167.00
Total:	4,837,176,282.65	4,934,412,618.94	5,056,711,462.62	5,186,198,931.73	5,237,513,752.00

Projection of contraceptives procurement for 2019-2023 in KR market with 100% TG coverage (in US dollars)

	2019	2020	2021	2022	2023
IUD	5,077.10	5,098.73	5,123.35	5,170.16	5,212.96
POC / POIC	173,646.00	174,385.84	175,227.79	176,828.87	178,292.84
POC / POBCP	9.732.60	9.774.07	9.821.26	9.911.00	9.993.05
COC	68,634,378.45	69,322,688.84	70,349,019.00	71,868,582.31	72,541,550.39
Condoms	477,685.65	479,720.88	482,037.02	486,441.48	490,468.71
Total:	69,300,519.81	69,991,668.35	71,021,228.41	72,546,933.82	73,225,517.95

Projection of contraceptives procurement for 2019-2023 in KR market with incomplete coverage (in KR soms)

	2019 (20%)	2020 (30%)	2021 (40%)	2022 (50%)	2023 (50%)
IUD	71,164.50	107,201.55	143,625.51	181,172.31	182,672.23
POC / POIC	1,989,144.97	2,996,429.87	4,014,529.23	5,064,013.39	5,105,938.20
POC / POBCP	135,867.10	206,721.51	279,709.39	354,256.14	357,380.38
COC	13,723,636.23	20,673,160.65	27,697,296.85	34,937,965.07	35,227,215.42
Condoms	6,695,296.88	10,085,734.26	13,512,572.19	17,045,048.76	17,186,164.19
Total:	22,615,109.68	34,069,247.85	45,647,733.18	57,582,455.66	58,059,370.42

Projection of contraceptives procurement for 2019-2023 in KR market with incomplete coverage (in US dollars)

	2019 (20%)	2020 (30%)	2021 (40%)	2022 (50%)	2023 (50%)
IUD	1,019.55	1,520.59	2,017.21	2,534.32	2,553.93
POC / POIC	28,497.78	42,502.55	56,383.84	70,837.75	71,385.96
POC / POBCP	1,946.52	2,932.22	3,928.50	4,955.50	4,996.52
COC	196,613.70	293,236.32	389,006.98	488,728.31	492,510.61
Condoms	95,921.16	143,060.06	189,783.32	238,433.97	240,279.23
Total:	323,998.71	483,251.74	641,119.85	805,489.85	811,726.26

Projection of contraceptives procurement for 2019-2023 from UNFPA Catalog with 100% TG coverage (in KR soms)

	2019	2020	2021	2022	2023
IUD	39,761.50	40,331.36	40,928.47	41,469.22	41,834.94
POC / POIC	10,127,343.42	10,272,488.28	10,424,573.62	10,562,303.06	10,655,453.73
POC / POBCP	679,335.48	689,071.70	699,273.48	708,512.28	714,760.77
COC	1,757,779.67	1,775,407.83	1,801,692.94	1,840,610.14	1,857,845.37
Condoms	3,912,908.82	3,968,988.54	4,027,749.86	4,080,964.48	4,116,955.17
Total:	16,517,128.89	16,746,287.72	16,994,218.38	17,233,859.18	17,386,849.98

Projection of contraceptives procurement for 2019-2023 from UNFPA Catalog with 100% TG coverage (in US dollars)

	2019	2020	2021	2022	2023
IUD	569.65	572.08	574.84	580.09	584.89
POC / POIC	145,090.88	145,709.05	146,412.55	147,750.35	148,973.57
POC / POBCP	9,732.60	9,774.07	9,821.26	9,911.00	9,993.05
COC	25,183.09	25,183.09	25,304.68	25,747.30	25,974.48
Condoms	56,058.87	56,297.71	56,569.52	57,086.41	57,559.02
Total:	236,635.08	237,536.00	238,682.84	241,075.14	243,085.01

Projection of contraceptives procurement for 2019-2023 from UNFPA Catalog with coverage incomplete (in KR soms)

	2019 (20%)	2020 (30%)	2021 (40%)	2022 (50%)	2023 (50%)
IUD	7,952.67	12,099.97	16,372.15	20,735.57	20,918.44
POC / POIC	2,025,468.68	3,081,746.48	4,169,829.45	5,281,151.53	5,327,726.86
POC / POBCP	135,867.10	206,721.51	279,709.39	354,256.14	357,380.38
COC	351,557.34	532,624.47	720,680.05	920,308.74	928,926.39
Condoms	782,581.83	1,190,696.66	1,611,100.07	2,040,482.40	2,058,477.75
Total:	3,303,427.61	5,023,889.09	6,797,691.11	8,616,934.38	8,693,429.83

Projection of contraceptives procurement for 2019-2023 from UNFPA Catalog with incomplete coverage (in US dollars)

	2019 (20%)	2020 (30%)	2021 (40%)	2022 (50%)	2023 (50%)
IUD	113.94	171.63	229.95	290.06	292.46
POC / POIC	29,018.18	43,712.72	58,565.02	73,875.17	74,486.78
POC / POBCP	1,946.52	2,932.22	3,928.50	4,955.50	4,996.52
COC	5,036.64	7,554.96	10,121.91	12,873.70	12,987.29
Condoms	11,211.77	16,889.31	22,627.81	28,543.21	28,779.51
Total:	47,327.04	71,260.84	95,473.19	120,537.64	121,542.57