

The background features a large, stylized graphic of a sun with a gear-like outer edge and a woven, lattice-like pattern in the center. The sun is rendered in shades of light blue and pink. The overall design is modern and clean, with a color palette of light blue, pink, and white.

**KYRGYZ REPUBLIC MINISTRY OF HEALTHCARE
REPUBLICAN CENTER OF MENTAL HEALTH**

**MANUAL ON PROVISION OF MEDICAL AND SOCIAL
CARE FOR TRANSGENDER, TRANSSEXUAL AND
GENDER NONCONFORMING PEOPLE**

FOR MEDICAL PROFESSIONALS OF ALL LEVELS
OF THE KYRGYZ REPUBLIC HEALTHCARE
SYSTEM AND OTHER INSTITUTIONS.

Kyrgyz Republic Ministry of Healthcare
Republican Center of Mental Health
City Endocrinology Dispensary
Kyrgyz State Medical Academy

**Manual on provision of medical and social care for transgender, transsexual and
gender nonconforming people**
for medical professionals of all levels of the Kyrgyz Republic healthcare system and
other institutions.

Bishkek 2017

This manual is the national standard of medical and social care for transgender, transsexual and gender nonconforming people.

Submitted by the Expert Council for clinical manuals/protocols quality assessment and approved by the Kyrgyz Republic Ministry of Healthcare Decree № 42 from January 18, 2017.

The manual is created to provide medical professionals of all levels of Kyrgyz Republic (KR) healthcare system and other institutions, and all interested individuals with the standards of medical and social care for transgender, transsexual and gender nonconforming people. Medical and social care for transgender, transsexual and gender nonconforming people is aimed at assisting them with safe and effective pathways to achieving lasting personal comfort with their gendered selves, in order to maximize their overall health, psychological well-being, and self-fulfillment on the base of respect for dignity, equality and human rights.

This manual is based on main positions of the international professional community – scientifically proved healthcare and expert consensus. The text of the manual is derived from the WPATH Standards of care for transgender, transsexual and gender nonconforming people, 7th version.¹

The manual is applicable for all groups of transgender, transsexual and gender nonconforming people who need medical and social care on the base of the given standards in frames of personal requirements.

Manual users: medical professionals of all levels of the healthcare system and other Kyrgyz Republic institutions involved into the process of medical and social care provision for transgender, transsexual and gender nonconforming people.

The manual was created in September-November 2016; corrected on the base of the Expert Council for clinical manuals/protocols quality assessment requirements in December 2016; approved by the Kyrgyz Republic Ministry of Healthcare Decree № 42 from January 18, 2017.

Manual revision and renewal are planned in 2020 or in the case of fundamentally new medically proved data on classification, improvement of terminology and other clinical recommendations appearance.

Working group on Manual writing:

Working group members:	
Abylova Nazgul	Endocrinologist, CED, Bishkek, Kyrgyzstan
Pavlova Natalia	Psychiatrist, RCMH, Bishkek, Kyrgyzstan
Chigaieva Iuliana	Psychiatrist, RCMH, Bishkek, Kyrgyzstan
Karagapolov Viacheslav	Psychotherapist, Moscow regional psychiatric hospital №9, Russian Federation

Technical writer, consultant:	
Karagapolova Irina	Psychiatrist, sexologist, transgender people care programs development specialist, RCSS Interdisciplinary Sexology department assistant, Moscow, Russian Federation
Reviewers:	
Galako Tatiana	Psychiatrist, MD, Kyrgyz Psychiatric Association President, Head of the KSMA psychiatry, psychotherapy and narcology Department, Bishkek, Kyrgyzstan
Shepelkevitch Alla	Endocrinologist, MD, Professor of the BSMU Endocrinology department, Minsk, Belarus
Lenskaya Irina	Psychiatrist, Head of the medical counsel of the Republic scientific Centre of the psychiatry, psychotherapy and narcology, Almaty, Kazakhstan
Community consultant:	
Kurmanov Sanjar	Executive director of «Labrys» NGO, Bishkek, Kyrgyzstan
Methodology expertise support:	
Baryktabasova Bermet	MD, MoH evidential medicine, clinic protocols and manuals elaboration Consultant, Bishkek, Kyrgyzstan
WPATH support:	
Jamison Green	Ph.D., WPATH Past-President, Chair of the Ethics Committee
Legislation and human rights consultant – Krapivina Eugenia, lawyer, Bishkek, Kyrgyzstan	

**WPATH support:¹**

I think it */the document/* is very good, and I would be honored to have my name listed as a supporter on behalf of WPATH. I was particularly glad to see the close conformity with the Standards of Care, Version 7, and the skillful integration of the Kyrgyz laws and policies, and the emphasis on individualized treatment and the principles of human rights. I believe this is a significant achievement.

Jamison Green, Ph.D. Past-President, WPATH.

Conflict of interest:

Working Group members don't have any conflict of interest and commercial interests in interaction with pharmaceutical companies or other organizations producing or distributing medicines used for hormone treatment of gender dysphoria.

¹ The World Professional Association for Transgender Health (WPATH) – is an international, multidisciplinary, professional association whose mission is to promote evidence-based care, education, research, advocacy, public policy, and respect in transsexual and transgender health. wpath@wpath.org

CONTENT

Terminology.....	7
Introduction.....	9
Review of therapeutical approaches	12
Epidemiologic considerations.....	14
Involvement of mental health professionals in the provision of care for transgender, transsexual and gender nonconforming people.....	15
Order of psychological-psychiatric examination of transgender, transsexual and gender nonconforming people, people with gender dysphoria.....	18
Specific questions of medical-social care for people with gender dysphoria.....	21
Hormone therapy for transgender, transsexual and gender nonconforming people	24
Hormonal feminization.....	26
Hormonal masculinization.....	33
Clinical situations for feminizing/masculinizing hormone therapy	40
Reproductive health of transgender, transsexual and gender nonconforming people.....	41
Other types of medical-social assistance for transgender, transsexual and gender nonconforming people.....	42
Appendices	43
1. Legal base for medical-social care provision for transgender, transsexual and gender nonconforming people in Kyrgyz Republic	44
2. The Application form for the provision of the psychological-psychiatric examination	47
3. The form of the Decision of the medical consultancy committee for the psychological- psychiatric examination of transgender, transsexual and gender nonconforming people.....	48
4. Medical conclusion FORM №048/y with the issuance instruction	49
5. Informed consent form for the feminizing hormone therapy.....	51
6. Informed consent form for the masculinizing hormone therapy.....	53
Methodological background	55

Terminology

Terminology in the area of “Medical-social care for transsexual, transgender, and gender nonconforming people” is rapidly evolving; new terms are being introduced, and the definitions of existing terms are changing.

Terms recognized by WPATH are the most useful in the international professional community and in accordance with the actual professional paradigm.

Some outdated terms are still partly used due to the necessity to create professional language of medical specialists, which is based on regional classification for the correspondence with already existing rules of medical documentation and healthcare statistics.

Terms below are based on the WPATH *Standards of care for the health of Transsexual, Transgender and Gender non-conforming people, 7th version considering the ICD-10 used in the Kyrgyz Republic*.

Cisgender people: Individuals whose gender identity does not differ from their sex assigned at birth.

Gender dysphoria: Distress that is caused by a discrepancy between a person’s gender identity and that person’s sex assigned at birth (and the associated gender role and/or primary and secondary sex characteristics).

Gender identity: A person’s intrinsic sense of being male (a boy or a man), female (a girl or a woman), or an alternative gender.

Gender identity disorder: Formal diagnosis set forth by the Diagnostic Statistical Manual of Mental Disorders, 4th Edition, Text Rev (DSM IV-TR) (APA, 2000) and ICD-10 (WHO, 1989). Characterized by a strong and persistent cross-gender identification and a persistent discomfort with one’s sex or sense of inappropriateness in the gender role of that sex, causing clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Gender nonconforming people: Individuals whose gender identity, role, or expression differs from what is normative for their assigned sex in a given culture and historical period.

Gender role or expression: Characteristics in personality, appearance, and behavior that in a given culture and historical period are designated as masculine or feminine (that is, more typical of the male or female social role). While most individuals present socially in clearly masculine or feminine gender roles, some people present in an alternative gender roles.

Genderqueer: Identity label that may be used by individuals whose gender identity and/or role does not conform to a binary understanding of gender as limited to the categories of man or woman, male or female.

Internalized transphobia: Discomfort with one’s own transgender feelings or identity as a result of internalizing society’s normative gender expectations.

Sex: Sex is assigned at birth as male or female, usually based on the appearance of the external genitalia. When the external genitalia are ambiguous, other components of sex (internal genitalia, chromosomal and hormonal sex) are considered in order to assign sex. For most



people, gender identity and expression are consistent with their sex assigned at birth. For transsexual, transgender, and gender-nonconforming individuals, gender identity or expression differ from their sex assigned at birth.

Transgender people: A diverse group of individuals who cross or transcend culturally defined categories of gender. The gender identity of transgender people differs to varying degrees from the sex they were assigned at birth.

Transition: Period of time when individuals change from the gender role associated with their sex assigned at birth to a different gender role. For many people, this involves learning how to live socially in another gender role. For others this means finding a gender role and expression that are most comfortable for them. Transition may or may not include feminization or masculinization of the body through hormones or other medical procedures. The nature and duration of transition are variable and individualized.

Transsexuals: Medical definition to describe individuals who seek to change or who have changed their primary and/or secondary sex characteristics through feminizing or masculinizing medical interventions (hormones and/or surgery), typically accompanied by a permanent change in gender role.

Introduction.

This manual describes the system of medical-social care for people whose gender identity is discordant to the sex assigned them at birth.

Medical-social care for the transgender, transsexual and gender nonconforming people is directed to assist them with safe and effective pathways to achieving lasting personal comfort with their gendered selves, in order to maximize their overall health, psychological well-being, and self-fulfillment.

Medical-social care for the transgender, transsexual and gender nonconforming people includes medical-psychological care and assessment, psychotherapeutical and social support, specialized medical care directed on gender identity affirmation and overcoming or decreasing of gender dysphoria if present. It also includes assistance in changing of gender expression and searching for its most comfortable variant and assistance in gender-affirming changing of the body – masculinization or feminization – if necessary.

Besides this, the process of gender identity affirmation and overcoming of gender dysphoria includes the need to change the gender marker in identity documents – legal gender recognition – and assistance in social readaptation.

Legal base for the provision of medical-social care for transgender, transsexual and gender nonconforming people.

Development of medical-social care for transgender, transsexual and gender nonconforming people is founded on the basic conception of the Kyrgyz Republic law **On the protection of public health in Kyrgyz Republic** (on January 9th, 2005) - “The protection of public health – is the combination of political, economic, legal, social, cultural, scientific, ecological, medical, sanitary and anti-epidemic arrangements directed on maintaining and strengthening of physical and mental health of every person, provision of health care in case of loss of health.”

Medical assistance affirming gender identity is regulated by the **Article 38 “Change, correction of the sexual belonging** of the same Law:

“Change, correction of the sexual belonging is realized in healthcare institutions through the medical interventions based on the desire of adult patient according with biomedical and socio-psychological indications in order defined by the authorized Kyrgyz Republic state health care institution.”

The order of the medical arrangements to affirm gender identity is described in this manual. The order of arrangements, related to the key aspect of the social assistance – legal gender recognition – is regulated by the normative acts of the civil status registration of the State registration service under the Kyrgyz Republic Government and Ministry of Justice. It includes the change of name, surname, and gender marker and implemented based on the conclusion of medical institution of the established type. In the given case the document of the established type obligated and sufficient for the legal gender recognition – is the **Medical conclusion FORM №048/y** (on the results of the psychological-psychiatric examination for transgender, transsexual and gender nonconforming people) issued on the base of decision of the medical consultancy committee (MCC) of RCMH. (Legal aspects in detail are described in APPENDIX 1.)

Classification.

Approaches of medical-social care for transgender, transsexual and gender nonconforming people are based on WHO classification of diseases accepted in the country and on the experience of international professional associations considering actual tendencies.

At the moment the **International classification of diseases, 10th revision** (ICD-10) is actual in the Kyrgyz Republic. As this classification has become outdated the terms and diagnostic approaches used there have also become outdated and do not correspond to contemporary tendencies accepted within the international professional community. This should be taken into consideration when providing diagnostics, professional conclusion delivery and establishing a medical-social care system.

This classification version contains the criteria of person's affiliation to transgender, transsexual and gender nonconforming variations in the Chapter *V Mental and behavioural disorders block Disorders of adult personality and behaviour (F60 – F69) within the category F64 Gender Identity Disorders*.

There are specific ciphers and criteria to describe transsexuality - F64.0 (*Transsexualism*); variations of gender identity in adolescence and childhood - F64.2 (*Gender Identity Disorders of childhood*); other transgender and gender nonconforming variations could be diagnosed with F64.8 (*Other Gender Identity Disorders*) and F64.9 (*Gender Identity Disorder unspecified*) ciphers.

Since this classification became the base for diagnostic and statistical processes, the main target to form medical-social approaches was not the described category itself but the complex experiences and needs connected to the person's discrepancy between gender identity and sex assigned at birth, including the necessity to affirm gender identity and to overcome or alleviate the gender dysphoria if existing.

Recently the **ICD 11** Beta Draft has been published. One of the objects for reclassification there was exactly this set of categories.

“Gender Identity Disorder” and “Transsexualism” are totally eliminated from classification as they don't have any exact clinical meaning. The new category of **“gender incongruence”** is introduced there. Another step toward depathologization is to remove all the corresponding categories from the *Chapter 06. Mental, behavioural and neurodevelopmental disorders to the Chapter 17. Conditions connected to sexual health*. That Chapter includes the Gender incongruence block (HA70-HA71) – a marked and persistent incongruence between an individual's experienced gender and the assigned sex – which contains the following categories: *HA70 - Gender incongruence of adolescents or adulthood* (including transsexualism, transsexual, gender dysphoria in adolescents and adults) and *HA71 - Gender incongruence of childhood* (including *psychosexual identity disorder of childhood*, gender dysphoria in children, disorder of gender identity or role in childhood).

The main target for medical-social and psychological assistance in the diagnosis frame is not the gender identity itself but **gender dysphoria** – a type of distress accompanying the discrepancy between person's gender identity and sex assigned at birth.

Gender dysphoria experience described in the **DSM-5** classification as the separate diagnostic category noted important as the basic clinical problem for interventions. That classification includes descriptions of Gender dysphoria in children and Gender dysphoria in adolescents and adults.

²Бета-версия, по состоянию на 05 декабря 2016 года (ICD-11 Beta Draft)

Review of therapeutical approaches.

Approaches of assisting for transsexual, transgender, and gender nonconforming people are based on the core principles of the WPATH Standards of care:

- to exhibit respect for patients with non-conforming gender identities;
- not to pathologize differences in gender identity or expression;
- to provide care that affirms patient's gender identities and reduces the distress of gender dysphoria if existed;
- to become knowledgeable about the health care needs of transsexual, transgender, and gender nonconforming people and to be able to assist them in gender identity affirmation and overcoming or reducing of gender dysphoria;
- to assist people in the requested frames and on the base of the informed consent, to combine standards of care with individual necessities and goals connected with the gender identity affirmation and overcoming or reducing of gender dysphoria if existed;
- to facilitate access to appropriate care and to offer continuity of care;
- to support and to advocate for transsexual, transgender, and gender nonconforming people within their families, communities and society to gain their social readaptation and integration.

In general the key target for medical interventions and medical-social care is experience and needs of people whose gender identity does not correspond with their sex assigned at birth.

Some people at some period of life span experience distress called gender dysphoria due to that discrepancy.

That distress could be associated with the discomfort of presence of secondary characteristics of the sex which does not match the person's gender identity and/or depend on necessity to conform the social expectations from the gender role associated to the registered sex.

Severity and duration of gender dysphoria may individually differ leading to different approaches of rendering of medical-social care for people experienced such distress.

International professional community admits that there is no universal algorithm and unified amplitude of care arrangements for people with gender dysphoria at the moment.

The capacity of care arrangements is defined individually in every case through a partnership interaction between the specialist and the person experiencing gender dysphoria. After the assessment of the person's condition and on the base of informed consent the individual plan of assistance is formed considering the person's needs in psychological, physical, social and legal gender affirmation.

The capacity of care arrangements is defined individually in every case through a partnership interaction between the specialist and the person experiencing gender dysphoria. After the assessment of the person's condition and on the base of informed consent the individual plan of assistance is formed considering the person's needs in psychological, physical, social and legal gender affirmation.

The capacity of care arrangements may include one or more types of treatment and medical-social activities directed toward the individual gender identity affirmation and overcoming or reducing of gender dysphoria if existed (psychotherapeutical support, hormone treatment or surgery, legal gender recognition, etc.).

In special cases patients may initiate the process of ceasing of medical assistance or retransitioning. If care approaches were shaped continually and accordingly to the principles described in this manual, it should not be assessed as a consequence of misdiagnosing, but as the result of individual experience and the right for self-determination in gender expression, and demands an individual approach, including arrangements directed on gender identity affirmation, overcoming and reducing of gender dysphoria which are noted in the manual. The decision about the capacity of arrangements, ceasing of medical assistance and in the special cases about retransitioning eventually rests with the patient.

Assistance in gender identity affirmation and/or gender dysphoria alleviation for transgender, transsexual and gender nonconforming people involves medical specialists. First of all they are:

- mental health professionals;
- endocrinologists.

Primary care specialists (family doctors, general practitioners), specialists in urogenital field (gynecologists, urologists, andrologists), mammologists, laboratory investigations specialists may be involved into that process too.

Social support in the frames of medical-social care for transgender, transsexual and gender nonconforming people should be focused on improvement of readaptation and socialization facilities first of all. The key phase of the social component of medical-social assistance is the change of the gender marker in the identity documents which is made by the Civil status acts registration offices based on the Medical conclusion FORM №048/y (on the results of the psychological-psychiatric examination for transgender, transsexual and gender nonconforming people) issued on the base of decision of the medical consultancy committee (MCC) of RCMH. The legal gender recognition process is the basic phase of the social transition significantly attributed to medical arrangements for the gender affirmation, overcoming and reducing of gender dysphoria if existed, and underlies the base of further readaptation and socialization of transgender, transsexual and gender nonconforming people.

Epidemiologic Considerations.

Formal epidemiologic studies on the incidence and prevalence of transsexuality specifically or transgender and gender nonconforming identities in general have not been conducted, and efforts to achieve realistic estimates are fraught with enormous difficulties, connected to cultural differences and variations of gender frames, absence of clear presentation of that spectrum and its boundaries.

Any data give representation about most visible and accessible for clinical observation part of that group only. Mostly they are people who addressed specialists for assistance in masculinization, feminization and/or change of the documents. A lot of people may be out of epidemiological assessment. That leads to misrepresentation of statistic evaluation and underestimation of prevalence.

For example, gender nonconformity among transgender male individuals tends to be relatively invisible in many cultures, particularly to Western health professionals and researchers who have conducted most of the studies on which the current estimates of prevalence and incidence of transsexuality are based (Winter, 2009).

Researchers who have studied incidence and prevalence have tended to focus on the most easily counted subgroup of gender-nonconforming individuals: transsexual individuals who experience gender dysphoria and who present for gender transition related care at specialist gender clinics (Zucker & Lawrence, 2009).

Most studies have been conducted in European countries such as Sweden, Great Britain, Netherlands, Germany, Belgium (Being Trans in the European Union, 2014). Direct comparison of the different research data is impossible due to the differences in methodology and systematization criteria. Any data is recommended to estimate as the starting point of epidemiological evaluation.

De Cuypere and colleagues (2007) reviewed 10 studies from eight countries with overall span of 39 years, as well as conducted their own. The prevalence in the binary part of the spectrum range is shown from 1:11,900 to 1:45,000 for transgender women and 1:30,400 to 1:200,000 for transgender men. The trend appears to be towards higher prevalence rates in the more recent studies, possibly indicating increasing numbers of people seeking clinical care. Thus Reed and colleagues (2009) reported a doubling of the numbers of people accessing care at gender clinics in the United Kingdom every five or six years. Zucker and colleagues (2008) reported a 4- to 5-fold increase in child and adolescent referrals to their clinic in Toronto, Canada over a 30-year period.

Previously unrecognized gender dysphoria is occasionally diagnosed sometimes when patients are seen with problems not connected to their gender identity directly (Cole and colleagues, 1997).

There was no research conducted to estimate prevalence of transgender, transsexual and gender nonconforming people in Kyrgyzstan. Clinical statistic analysis shows that for the period of time from 2007 to 2015 more than 30 people received psychiatric confirmation about presence of the diagnosis from ICD-10th F64 category (Pavlova N. – Bishkek, 2016).

Mental health professionals involvement into the provision of care for transgender, transsexual and gender nonconforming people.

Transgender, transsexual and gender nonconforming people may need assistance of mental health professionals at different times of their life span and in different periods of their gendering. Addressing the mental health professionals may be connected with the following challenges:

- need for assistance to explore gender identity,
- searching for the most comfortable variant of gender expression and change of gender role,
- experiencing of gender dysphoria,
- need for support and maintaining in different phases of transition and, in special cases, retransition,
- need for support and assistance in legal gender recognition,
- need for assistance in readaptation,
- needs unrelated to gender concerns.

The main clinical problem in provision of medical-social and psychological assistance for transgender, transsexual and gender nonconforming people is gender dysphoria. The specific need of transgender, transsexual and gender nonconforming people which often becomes the reason to reach out to mental health professionals is the necessity to get a medical conclusion of the corresponding diagnosis issuing in an established form (FORM №048/y) to present it at the civil status acts registration (CSAR) office. That conclusion can be the basis for the change of gender marker in identity documents – legal gender recognition.

Besides transgender, transsexual and gender nonconforming people themselves, professional mental health assistance could be necessary for their family members (parents, children, partners, relatives).

Tasks of mental health professionals working with adult transgender, transsexual and gender nonconforming people:

Identification of the reasons for addressing for professional assistance. Among the reasons for addressing for professional assistance may be the need for combination of the following services: psychotherapeutic assistance to explore gender identity and expression, to facilitate a coming-out process; evaluation of gender dysphoria, assistance in gender identity affirmation, psychotherapeutical assistance during feminizing/masculinizing medical interventions; assistance and support in the process of legal gender recognition; psychological support for family members; psychotherapy unrelated to gender concerns; or other professional services in different combinations and volumes.

Evaluation of gender dysphoria. The evaluation includes history and development of gender dysphoric feelings, influences of dysphoria on person's mental health and the level of psychosocial adaptation, the availability of support from family and close people, the impact for mental health from stigma attached to gender nonconformity, the experience of real life in desired gender including social and medical masculinization/feminization before the visit. The role of mental health professionals includes making reasonably sure that the gender dysphoria is not secondary to the other diagnoses and could not be the manifestation

of a psychiatric disorder. The evaluation may result in a preliminary diagnosis basic for the individual plan of further investigation and support or in no diagnosis.

Information provision regarding options for gender identity and expression and possible ways of assistance and medical-social arrangements to overcome or reduce gender dysphoria and to affirm gender identity. Besides the provision of information in the frames of that task possible steps of individual plan of necessary medical-social arrangements should be discussed in order to prepare to choose the diagnostic procedures and medical-social interventions, their risks, consequences and personal expectations from them.

Assessment, diagnosing and discussion of treatment options on coexisting mental health concerns. Realization of that task includes systematization of the findings and establishment of the diagnosis related to a person's gender identity, presence of gender dysphoria of any intensity; assessment of mental status and evaluation of mental disorders connected or not to the gender dysphoria; deliberation of the assistance amount including psychotherapy and the question of pharmacological treatment of coexisting mental/behavior health problems (anxiety, depression, self-harm, a history of abuse and neglect, compulsivity, substance abuse, sexual concerns, personality disorders, eating disorders, psychotic disorders, and others). The presence of coexisting mental health concerns does not necessarily preclude possible changes in gender role, gender affirming or access to feminizing/masculinizing hormones or surgery; rather, these concerns need to be optimally managed prior to, or concurrent with, treatment of gender dysphoria. In some cases medical treating of the concomitant problems can greatly facilitate the improvement in condition, overcoming or reducing the intensity of gender dysphoria.

Evaluation of indications, preparation of the person for feminizing/masculinizing interventions and offering of assistance and psychotherapeutical support during transition. Implementation of this task includes mental health professional assistance to patients planning feminizing or masculinizing hormone and surgical interventions: facilitation in making of reasonable decision about further steps of transition, psychological support while preparing for the interventions, assistance in evaluation of readiness for them and validity of expectations, deliberating of psychological and social consequences of planning arrangements, offering of the psychotherapeutical accompanying during feminizing and masculinizing interventions.

Offering of psychotherapeutical assistance. In order to realize that task it is reasonable to deliberate a possibility of maintaining psychological support and psychotherapeutical assistance in different phases of real life experience and preparing for transition; while hormone therapy or another type of medical-social assistance is implemented; in further observation and condition evaluation; for resocialization; for alleviation of contaminant difficulties and problems not related to the person's gender identity.

Psychotherapeutical assistance is not directed at change of the person's gender identity but should help to explore problems connected with gender identity and gender dysphoria and rather supports the searching for ways of overcoming gender dysphoria and finding the most comfortable way for the person's gender expression.

The main goal of psychotherapy for transgender, transsexual and gender nonconforming people is to find a strategy to improve their psychological wellbeing, quality of life and self-fulfillment best.

Offering of psychotherapy may be directed not at transgender, transsexual and gender nonconforming people only but also their family members and close related people in form of family and partnership therapy.

Contribution to the process of gender marker change and legal gender recognition and advocacy. This task includes not only examination, diagnosing and making of the MCC conclusion of the established type for the CSAR office. It also means providing of explanations, justifications and recommendations on the necessity of the gender marker change in identity documents – legal gender recognition – as the medical-social measure to affirm person's gender identity, to alleviate gender dysphoria and to help in social readaptation.

Besides that mental health professionals should participate as experts and support in investigatory and judicial activities, interactions with the legislative and executive, forensic and social system institutions in cases and situations involving transgender, transsexual and gender nonconforming people with the purpose to protect them from discrimination and making of decisions without evaluation of the context, specifics and possible consequences for the person.

Education and provision of information. Mental health professionals have the actual and evidence-based information about the world's professional community positions. Thus they have the task to influence the formation of the basic, prejudice-free presentations of specific issues connected with gender identity and its varieties for society and communities. It must be done to overcome stigma, discrimination, social pressure and neglect and to prevent violence towards transgender, transsexual and gender nonconforming people in their families, social groups (education, work) and society in general.

Ethical realization of assistance. Assistance for transgender, transsexual and gender nonconforming people should be implemented on the basis of common professional ethical principles (including principles of confidentiality, informed consent, etc.) and with specific concerns.

It is not ethical to offer assistance directed at changing the person's gender identity and gender expression for matching the sex assigned at birth better. Such approaches have shown their failure especially in evaluation of the long-term outcomes.

It is important to take into consideration such trans-specific peculiarities as choice of name and pronoun in address the person in their desired manner to form a therapeutic contact, overcoming the discomfort of discrepancy between person's gender identity and sex assigned at birth.

The order of psychological-psychiatric examination of transgender, transsexual and gender nonconforming people, people with gender dysphoria.

The order of psychological-psychiatric examination of transgender, transsexual and gender nonconforming people, people with gender dysphoria in reaching a decision on the change of gender marker. It is regulated with the procedure developed by the working group under the Kyrgyz Republic Ministry of Health, which included specialists of the Kyrgyz Republic Ministry of Health (KR MoH) and the Republican Centre of Mental Health (RCMH) with the participation of civil activists, representatives of judicial institutions and lawyers, after an extensive process of consulting and with the support of WPATH members. It corresponds to laws of the Kyrgyz Republic.

Guideline on the order of psychological-psychiatric examination of transgender, transsexual and gender nonconforming people, people with gender dysphoria.

In the guideline the examination algorithm is reflected including the following positions:

1. General positions.

1.1. This guideline regulates the order of the psychological-psychiatric examination of transgender, transsexual and gender nonconforming people, people with gender dysphoria.

1.2. Gender dysphoria is the distress caused by a discrepancy between a person's gender identity and that person's birth assigned sex (and the associated gender role and/or primary and secondary sex characteristics).

1.3. Identification of gender dysphoria (GD) in a person insisting on gender marker change, establishing of the diagnosis from a corresponding ICD category, provision of the psychological-psychiatric examination, admission of the Decision of the Medical consultancy committee (MCC) and pronouncement of the Medical conclusion with recommendations for the gender marker change issued on the established FORM №048/y are in the exclusive competence of the MCC for the psychological-psychiatric examination at the RCMH under the Kyrgyz Republic Ministry of Healthcare.

1.4. The MCC structure and working order are defined by RCMH.

2. Order of the examination

2.1. Psychological-psychiatric examination of the person with GD in Kyrgyz Republic is conducted by the RCMH.

2.2. Person with GD should be informed by the psychiatrist about the order of the psychological-psychiatric examination for gender marker change.

2.3. To pass the psychological-psychiatric examination person with GD should present the following documents:

2.3.1. The Application of the established type (APPENDIX 2)

2.3.2. Identity certifying document

2.4. During the inquiry psychiatrist should collect a thorough history of life and gender identity forming process, development of GD and its influences on the person's mental health.

2.5. To assess GD psychiatrist provides patient with a referral to a psychological-psychiatric examination according to the established list of medical conclusions necessary for the clinical examination of the person with GD (see the list below).

2.6. Patient is to undergo examination of mental status and observation in the out-patient department of the RCMH not longer than four months from the moment of submission of the Application.

2.7. Equivalence to the criteria of the valid version of the ICD is sufficient indication for the change of the gender marker.

3. Contraindications for the gender marker change

3.1. Contraindications for the gender marker change are the exception criteria of the valid version of the ICD.

3.1.1. Age under 18 years. (Except situations, when official representatives present notarized agreement).

4. MCC certificates

4.1. Person with GD is referred to MCC after the completion of examination and observation.

4.2. MCC comes to decision (APPENDIX 3) and provides the Conclusion of the established type with one of the diagnoses from the corresponding category of the valid ICD version with recommendations for the gender marker change.

4.3. On the base of MCC Decision after the psychological-psychiatric examination a person gets the Medical conclusion FORM №048/y signed by the chairman of the MCC in five working days (APPENDIX 4).

4.4. Medical conclusion FORM №048/y is a necessary and sufficient base for the person with GD to address to the Civil status acts registration (CSAR) Office for introduction of necessary changes (name, gender marker) and getting the corresponding identity documents (legal gender recognition).

4.5. In case of refusal on the Application for the gender marker change MCC should provide reasons for the decision with a notarized copy for the applicant.

4.6. MCC refusal on the Application for the gender marker change may be appealed in the order established by laws of the Kyrgyz Republic.

List of medical conclusions necessary for the psychological-psychiatric examination of a person with GD is established in accordance with the exception criteria given in the valid version of ICD. For the current moment the following are necessary:

- Endocrinologists conclusion (hormonal sex);
- Urologists or gynecologists conclusion (anatomical sex);
- Conclusion on karyotype investigation (chromosomal sex).

Together with psychological-psychiatric examination, the assessment of mental status of the person addressed for the mental health professional assistance is provided and individual plan of assistance in mental health and psychological condition support and improvement are created considering a person's needs and tasks for mental health professional working with the adult transgender, transsexual and gender nonconforming people described above.



In case of presence of mental health problems in transgender, transsexual and gender nonconforming people in different stages of their life related to aspects of mental health other than GD a hospitalizing may be required. That question should be solved on the general base in accordance with KR legislation and principle of informed consent. The choice of the department considering the gender criterion must be arranged with attention to the patient's wish on the base of guaranteed safe staying.

Specific questions of medical-social care for people with gender dysphoria.

Assessment and work with children and adolescents with gender dysphoria.

Gender dysphoria in children and adolescents remains in adulthood in different proportion. Gender dysphoria during childhood does not inevitably continue into adulthood. Different data shows that prepubertal children's gender dysphoria remains in adulthood in 12-27% of cases. The persistence of gender dysphoria into adulthood appears to be much higher for adolescents.

Gender-nonconforming behaviors in children may continue into adulthood, but such behaviors are not necessarily indicative of gender dysphoria and a need for treatment. Gender dysphoria is not synonymous with diversity in gender expression.

Phenomenology in children

Children as young as age two may show features that could indicate gender dysphoria. They may express a wish to be of the other sex and be unhappy about their physical sex characteristics and functions. In addition, they may prefer clothes, toys, and games that are commonly associated with the other sex and prefer playing with other-sex peers. Some children demonstrate extremely gender nonconforming behaviour and wishes, accompanied by persistent and severe discomfort with their primary sex characteristics. In other children, these characteristics are less intense or only partially present.

It is relatively common for gender dysphoric children to have coexisting anxiety and depression. The prevalence of autism spectrum disorders seems to be higher in gender dysphoric children than in the general population.

Phenomenology in adolescents

In most children, gender dysphoria will disappear before, or early in, puberty. However, in some children these feelings will intensify and body aversion will develop or increase as they become adolescents and their secondary sex characteristics develop.

The more extreme gender nonconformity in childhood is associated with persistence of gender dysphoria into late adolescence and early adulthood. Yet many adolescents and adults presenting with gender dysphoria do not report a history of childhood gender nonconforming behaviour.

Adolescents who experience their primary and/or secondary sex characteristics and their sex assigned at birth as inconsistent with their gender identity may be intensely distressed about it, declare the wish to get rid of them and strive to use hormones and undergo surgery. Some adolescents have started living in their desired gender role before graduating the school.

Inexperienced clinicians may mistake indications of gender dysphoria for delusions. Phenomenologically, there is a qualitative difference between the presentation of gender dysphoria and the presentation of delusions or other psychotic symptoms. The vast majority of children and adolescents with gender dysphoria are not suffering from underlying severe psychiatric illness such as psychotic disorders but quite often have coexisting mental disorders such as anxiety and depression, and/or behavioural disorders such as oppositional defiant disorder.

There seems to be a higher prevalence of autistic spectrum disorders in clinically referred, gender dysphoric adolescents than in the general adolescent population.

Competency of mental health professionals working with children or adolescents with gender dysphoria besides the knowledge and skills in the field of transdenderism, gender identity varieties and psychosexual development must include competency in diagnosing and treating the ordinary problems of children and adolescents.

Tasks of mental health professionals working with children and adolescents with gender dysphoria

- 1. Assess gender dysphoria in children and adolescents through** the history of life, experience and manifestations connected to gender dysphoria, to assess the family reaction upon the unusual gender expression of the child, family internal and external relations and general social functioning.
- 2. Provide family counseling and supportive psychotherapy** to assist children and adolescents with exploring their gender identity, alleviating distress related to their gender dysphoria, and ameliorating any other psychosocial difficulties.
- 3. Assess and treat any coexisting mental health concerns** of children or adolescents connected or not directly connected to gender dysphoria (or refer to another mental health professional for treatment). Such concerns should be addressed as part of the overall treatment plan.
- 4. Educate and advocate on behalf** of gender dysphoric children, adolescents, and their families in their community. This is particularly important for children and adolescents who do not conform to socially prescribed gender norms as they may experience harassment, putting them at risk for social isolation, depression, and other negative aftermath.
- 5. Provide children, youth, and their families with information** about gender identity and expression, gender dysphoria and abilities to get help. Mental health professionals could provide consultation and contact arrangements with a pediatric endocrinologist for the purpose of assessment, education, and involvement in any decisions about physical interventions.

Psychological assessment and psycho-social interventions for children and adolescents with gender dysphoria.

When assessing children and adolescents who present with gender dysphoria, mental health professionals should broadly conform to the following guidelines:

- Mental health professionals should not dismiss or express a negative attitude towards nonconforming gender identities or indications of gender dysphoria. They should acknowledge the presenting concerns of children, adolescents, and their families; offer a thorough assessment for gender dysphoria and any coexisting mental health concerns; and educate clients and their families about therapeutic options, if needed. Acceptance, and alleviation of secrecy, can bring considerable relief to gender dysphoric children/adolescents and their families.
- For adolescents, the assessment phase should also be used to inform youth and their families about the possibilities and limitations of different treatments. This is necessary for informed consent, but also important for assessment.
- Mental health professionals should help families to have an accepting and nurturing response to the concerns of their gender dysphoric child or adolescent. Families play an important role in the psychological health and well-being of youth. This also applies to peers and mentors from the community, who can be another source of social support.

- Psychotherapy should focus on reducing a child’s or adolescent’s distress related to the gender dysphoria and on ameliorating any other psychosocial difficulties. For youth pursuing transition, psychotherapy may focus on supporting them before, during, and after transition. Treatment aimed at trying to change a person’s gender identity and expression to become more congruent with sex assigned at birth has been attempted in the past without success and is no longer considered ethical.
- Families should be supported in managing uncertainty and anxiety about their child’s or adolescent’s psychosexual outcomes and in helping youth to develop a positive self-concept.
- It’s advised to give youth an “ample room” to explore different options for gender expression.
- Youth and their families should be supported in making difficult decisions regarding the extent to which children and adolescents are allowed to express a gender role that is consistent with their gender identity, as well as the timing of changes in gender role and possible social transition. For example, they might accomplish social transition only partly (e.g., by wearing clothing and having a hairstyle that reflects gender identity) or completely (e.g., by also using a name and pronouns congruent with gender identity). The question of informing other people about the situation should be solved too.
- Health professionals should educate and advocate children and their families in their interactions with community members and authorities such as teachers, school boards, and courts.
- Mental health professionals should strive to maintain a therapeutic relationship with gender-nonconforming children/adolescents and their families throughout any subsequent social changes or physical interventions. This ensures that decisions about gender expression and the treatment of gender dysphoria are thoughtfully and recurrently considered. The same reasoning applies if a child or adolescent has already socially changed gender role prior to being seen by a mental health professional.
- It could be reasonable to present the gender role change as an exploration rather than an irreversible situation. Mental health professionals can assist parents in identifying potential in-between solutions or compromises (e.g., desired gender expression only when on vacation). It is also important that parents explicitly let the child know that there is a way back.

Regardless of a family’s decisions regarding transition, professionals should counsel and support them as they work through the options and implications. If parents do not allow their young child to make a gender-role transition, they may need counseling to assist them with meeting their child’s needs in a sensitive and nurturing way, ensuring that the child has ample possibilities to explore gender feelings and behavior in a safe environment. If parents do allow their young child to make a gender role transition, they may need counseling to facilitate a positive experience for their child. For example, they may need support in using correct pronouns, maintaining a safe and supportive environment for their transitioning child (e.g., in school, peer group settings), and communicating with other people in their child’s life. In either case, as a child nears puberty,

Hormone therapy for transgender, transsexual and gender nonconforming people.

Feminizing/masculinizing hormone therapy – the administration of exogenous endocrine agents to induce feminizing or masculinizing changes – is a medically necessary intervention for many transsexual, transgender, and gender nonconforming individuals with gender dysphoria.

Some people seek maximum feminization/masculinization, while others experience relief with an androgynous presentation resulting from hormonal minimization of existing secondary sex characteristics. Hormone therapy must be individualized based on a patient's goals, the risk/benefit ratio of medications, the presence of other medical conditions, and consideration of social and economic issues. Hormone therapy can provide significant comfort to patients who do not wish to make a social gender role transition or undergo surgery, or who are unable to do so.

Feminizing/masculinizing hormone therapy is best undertaken in the context of a complete and coordinated approach to health care and psychosocial welfare.

Many of the screening tasks and management of comorbidities associated with long-term hormone use, such as cardiovascular risk factors and cancer screening, fall more uniformly within the scope of primary care.

Given the multidisciplinary needs of transsexual, transgender, and gender-nonconforming people seeking hormone therapy, as well as the difficulties associated with fragmentation of care in general it is strongly recommended to obtain increased training of primary care providers in the broad area of medical and psychosocial assistance for transgender, transsexual and gender nonconforming people. Providers related to hormone therapy should have the knowledge and experience to assess gender dysphoria.

The criteria for hormone therapy are as follows:

- Persistent, well-documented gender dysphoria in frames of valid version of the ICD diagnosis verified by the document of established type – Medical conclusion FORM №048/y;
- Capacity to make a fully informed decision and to consent for treatment;
- Age of legal majority in a given country;
- If significant medical or mental health concerns are present, they must be reasonably well-controlled.

The presence of coexisting mental health concerns does not necessarily preclude access to hormone therapy; though, these concerns need to be managed prior to, or concurrent with, treatment of gender dysphoria. Hormone therapy could be initiated only in presence of patient's informed consent (APPENDICES 5 and 6).

In selected circumstances, it can be an acceptable practice to provide hormones to patients who have not fulfilled these criteria. It is possible for patients who have already established themselves in their affirmed gender and who have a history of self-prescribed or prior hormone use. Blood seropositivity for blood-borne infections such as HIV or hepatitis B, C or D is not a contraindication for hormone therapy initiation.

In rare cases, hormone therapy may be contraindicated due to serious individual health conditions. Health professionals should assist these patients with accessing nonhormonal

interventions for gender dysphoria. A qualified mental health professional familiar with the patient is an excellent resource in these circumstances.

Hormone therapy should be administered individually in accordance with the patient's purposes, chosen medicines risk-benefit ratio, their accessibility and price, presence of concomitant disorders and other circumstances.

Informed Consent

Feminizing/masculinizing hormone therapy may lead to irreversible physical changes. Thus, hormone therapy should be provided only to those who are legally able to provide informed consent (including incarcerated people and cognitively impaired people who are considered competent to participate in their medical decisions).

Providers should document in the medical record that comprehensive information has been provided and understood about all relevant aspects of the hormone therapy, including both possible benefits and risks and the impact on reproductive capacity.

Obtaining informed consent for hormone therapy is an important task for providers to ensure that patients understand the psychological and physical benefits, risks and limitations of hormone therapy, as well as its psychosocial implications with the age, previous hormones usage and concomitant somatic and mental health problems taken into consideration (APPENDICES 5 and 6).

Hormonal feminization.

Expected effects of the hormonal feminization

Hormonal feminization results in the body changes that better corresponds with the patient's gender identity.

The basic feminization effects are as follows:

Breast growth (variable), decreased erectile function, decreased testicular size, and increased percentage of body fat compared to muscle mass.

Most of those physical changes occur over the course of two years. The amount of physical change and the exact timeline of effects can be highly variable.

EFFECTS AND EXPECTED TIME COURSE OF FEMINIZING HORMONES based on clinical observations (Adapted from Hembree et al. (2009). *The Endocrine Society*).

Effect	Expected onset	Expected maximum effect
Body fat redistribution	3–6 months	2–5 years
Decreased muscle mass/ strength	3–6 months	1–2 years*
Softening of skin/decreased oiliness	3–6 months	Unknown
Decreased libido	1–3 months	1–2 years
Decreased spontaneous erections	1–3 months	3–6 months
Male sexual dysfunction	Variable	Variable
Breast growth	3–6 months	2–3 years
Decreased testicular volume	3–6 months	2–3 years
Decreased sperm production	Variable	Variable
Thinning and slowed growth of body and facial hair	6–12 months	> 3 years**
Male pattern baldness	No regrowth, loss stops 1–3 months	1–2 years***

* Significantly dependent on amount of exercise.

** Complete removal of male facial and body hair requires electrolysis, laser treatment, or both.

*** Familial scalp hair loss may occur if estrogens are stopped.

The degree and rate of physical effects depends in part on the dose, route of administration, and medications used, which are selected in accordance with a patient's specific medical goals and medical risk profile. There is no current evidence that response to hormone therapy can be reliably predicted based on age, body habitus, ethnicity, or family appearance. All other factors being equal, there is no evidence to suggest that any medically approved type or method of administering hormones is more effective than any other in producing the desired physical changes.

Examination before initiation of feminizing hormone therapy and risk assessment

- It is necessary to perform initial evaluation including deliberation with the patient of desired body changes, health condition, medical investigations, risk assessment and laboratory findings. Expected influences of feminizing hormones and their possible adverse effects including impact on fertility must be discussed also. Important to note that reproductive options should be discussed with the patient before initiation of feminizing hormone therapy.
- The initial evaluation for hormone therapy assesses a patient’s clinical goals and risk factors for hormone-related adverse events. During the risk assessment, the patient and clinician should develop a plan for reducing risks wherever possible, either prior to initiating therapy or as part of ongoing harm reduction.
- All assessments should include a thorough physical exam, including weight, height, and blood pressure. The need for breast, genital, and rectal exams, which are sensitive issues for most transsexual, transgender, and gender nonconforming patients, should be based on individual risks and preventive health care needs.
- Depending on a patient’s age and risk profile, there may be appropriate screening tests or exams for conditions affected by hormone therapy. Ideally, these screening tests should be carried out prior to the start of hormone therapy.
- There are no absolute contraindications to feminizing therapy per se, but absolute contraindications exist for the different feminizing agents, particularly estrogen. These include previous venous thrombotic events related to an underlying hypercoagulable condition, history of estrogen-sensitive neoplasm, and end-stage chronic liver disease.
- Other medical conditions, as noted below, can be exacerbated by estrogen or androgen blockade, and therefore should be evaluated and reasonably well controlled prior to starting hormone therapy.
- Clinicians should particularly attend to tobacco use, as it is associated with increased risk of venous thrombosis, which is further increased with estrogen use. Consultation with a cardiologist may be advisable for patients with known cardio- or cerebrovascular disease.
- Baseline laboratory values are important to both assess initial risk and evaluate possible future adverse events. Initial labs should be based on the risks of feminizing hormone therapy, as well as individual patient risk factors, including family history.

RISKS ASSOCIATED WITH FEMINIZING HORMONE THERAPY

Risk Level	Conditions
Likely increased risk	Venous thromboembolic disease** Gallstones Elevated liver enzymes Weight gain Hypertriglyceridemia
Likely increased risk with presence of additional risk factors*	Cardiovascular disease

Possible increased risk	Hypertension Hyperprolactinemia or prolactinoma
Possible increased risk with presence of additional risk factors*	Type 2 diabetes**
No increased risk or inconclusive	Breast cancer
* Additional risk factors include age.	
** Risk is greater with oral estrogen administration than with transdermal estrogen administration.	

These and some other risks are described in more details below in the **Risks and adverse effects of feminizing hormone therapy**.

Dynamic control of feminizing hormone therapy.

In general, clinicians who prescribe hormone therapy should engage in the following tasks:

1. Provide ongoing medical monitoring, including regular physical and laboratory examination to monitor hormone effectiveness and side effects.
2. Communicate as needed with a patient's primary care provider, mental health professional, and surgeon.
3. If needed, provide patient with a brief written statement indicating that she is under medical supervision and care that includes feminizing hormone therapy. Particularly during the early phases of hormone treatment, a patient may wish to carry this statement at all times to help prevent difficulties with the police and other authorities.

The aim of medical monitoring during hormone therapy is to evaluate the degree of ongoing body feminization and to control possible adverse effects appearance.

Monitoring of transgender female persons on cross-hormone therapy <i>Adapted from Hembree et al. (2009). The Endocrine Society.</i>
1. Evaluate patient every 2–3 months in the first year and then 1–2 times per year afterward to monitor for appropriate signs of feminization and for development of adverse reactions.
2. Measure serum testosterone and estradiol every 3 months. a. Serum testosterone levels should be less than 55 ng/dl. b. Serum estradiol should not exceed the peak physiological range for young healthy females, with ideal levels less than 200 pg/ml. c. Doses of estrogen should be adjusted according to the serum levels of estradiol.
3. For individuals on spironolactone, serum electrolytes (particularly potassium) should be monitored every 2–3 months initially in the first year.
4. Routine cancer screening as recommended in nontranssexual individuals (breasts, colon, prostate).
5. Consider bone mineral density testing at baseline if risk factors for osteoporotic fracture are present (e.g. previous fracture, family history, glucocorticoid use, prolonged hypogonadism). In individuals at low risk, screening for osteoporosis should be conducted at age 60 and in those who are not compliant with hormone therapy.

Patients with comorbid medical conditions may need to be monitored more frequently. In the absence of other indications, health professionals may prioritize monitoring for those risks that could be increased by hormone therapy.

The best assessment of hormone efficacy is clinical response. Is a patient developing a feminized body while minimizing masculine characteristics, consistent with her gender goals? In order to more rapidly predict the hormone dosages that will achieve clinical response, one can measure testosterone levels for suppression below the upper limit of the normal female range and estradiol levels within a premenopausal female range but well below supraphysiologic levels.

Monitoring for adverse events should include both clinical and laboratory evaluation. Follow-up should include careful assessment for signs of cardiovascular impairment and venous thromboembolism (VTE) through measurement of blood pressure, weight, and pulse; heart and lung exams; and examination of the extremities for peripheral edema, localized swelling, or pain. Laboratory monitoring should be based on the risks of hormone therapy described above, a patient's individual comorbidities and risk factors, and the specific hormone regimen itself.

Medicines, dosages, feminizing therapy regimens.

Below are reviews of the most broadly used medicines and feminizing therapy regimens advised by the Endocrine Society Guidelines (Hembree et al., 2009).

Estrogen. Use of oral estrogen, and specifically ethinyl estradiol, appears to increase the risk of Venous thromboembolic disease (VTE). Because of this safety concern, ethinyl estradiol is not recommended for feminizing hormone therapy. Transdermal estrogen is recommended for those patients with risks factors for VTE. The risk of adverse events increases with higher doses, particular doses resulting in supraphysiologic levels. Patients with comorbid conditions that can be affected by estrogen should avoid oral estrogen if possible and be started at lower levels. Some patients may not be able to safely use the levels of estrogen needed to get the desired results. This possibility needs to be discussed with patients well in advance of starting hormone therapy.

Androgen-reducing medications (“anti-androgens”). A combination of estrogen and “anti-androgens” is the most commonly studied regimen for feminization. Androgen-reducing medications have the effect of reducing either endogenous testosterone levels or testosterone activity, and thus diminishing masculine characteristics such as body hair. They minimize the dosage of estrogen needed to suppress testosterone, thereby reducing the risks associated with high-dose exogenous estrogen.

Common anti-androgens include the following:

- *Spirolactone*, an antihypertensive agent, directly inhibits testosterone secretion and androgen binding to the androgen receptor. Blood pressure and electrolytes need to be monitored because of the potential for hyperkalemia.
- *Cyproterone acetate* is a progestational compound with anti-androgenic properties. This medication is not approved in the United States because of concerns over potential hepatotoxicity, but it is widely used elsewhere.

- *Gonadotropin-releasing hormone (GnRH) agonists* (e.g., goserelin, buserelin, triptorelin) are neurohormones that block the gonadotropin-releasing hormone receptor, thus blocking the release of follicle stimulating hormone and luteinizing hormone. This leads to highly effective gonadal blockade. However, these medications are expensive and only available as injectables or implants.
- *5-alpha reductase inhibitors* (finasteride and dutasteride) block the conversion of testosterone to the more active agent, 5-alpha-dihydrotestosterone. These medications have beneficial effects on scalp hair loss, body hair growth, sebaceous glands, and skin consistency.

Cyproterone and spironolactone are the most commonly used anti-androgens and are likely the most cost-effective.

Progestins. With the exception of cyproterone, the inclusion of progestins in feminizing hormone therapy is controversial. Because progestins play a role in mammary development on a cellular level, some clinicians believe that these agents are necessary for full breast development. However, a clinical comparison of feminization regimens with and without progestins found that the addition of progestins neither enhanced breast growth nor lowered serum levels of free testosterone. There are concerns regarding potential adverse effects of progestins, including depression, weight gain, and lipid changes. Progestins (especially medroxyprogesterone) are also suspected to increase breast cancer risk and cardiovascular risk in women. Micronized progesterone may be better tolerated and have a more favorable impact on the lipid profile than medroxyprogesterone does.

Wide variation in doses and types of hormones have been published in the medical literature. In addition, access to particular medications may be limited by a patient's geographical location and/or social or economic situations. It is strongly recommend that hormone providers regularly gain new information and use those medications that safely meet individual patient needs with available resources.

Approximate feminizing hormones regimens	
MEDICINE	DOSAGE
Estrogen	
Oral: estradiol	2.0–6.0 mg/d
Transdermal: estradiol patch	0.1– 0.4 mg twice weekly
Parenteral: estradiol valerate	5–20 mg im every 2 wk
Parenteral: estradiol cypionate	2–10 mg im every week
Antiandrogens	
Spironolactone	100–200 mg/d
Cyproterone acetate	50–100 mg/d
GnRH agonist	3.75 mg sc monthly

Risks and adverse effects of feminizing hormone therapy

All medical interventions carry risks. The likelihood of a serious adverse event is dependent on numerous factors: the medication itself, dose, route of administration, and a patient's clinical characteristics (age, comorbidities, family history, health habits). It is thus impossible to predict whether a given adverse effect will happen in an individual patient.

Likely Increased Risk:

Venous thromboembolic disease

- Estrogen use increases the risk of venous thromboembolic events (VTE), particularly in patients who are over age 40, smokers, highly sedentary, obese, and who have underlying thrombophilic disorders.
- This risk is increased with the additional use of third generation progestins.
- This risk is decreased with use of the transdermal (versus oral) route of estradiol administration, which is recommended for patients at higher risk of VTE.

Cardiovascular, cerebrovascular disease

- Estrogen use increases the risk of cardiovascular events in patients over age 50 with underlying cardiovascular risk factors. Additional progestin use may increase this risk.

Lipids

- Oral estrogen use may markedly increase triglycerides in patients, increasing the risk of pancreatitis and cardiovascular events.
- Different routes of administration will have different metabolic effects on levels of HDL cholesterol,

LDL cholesterol and lipoprotein(a).

- In general, clinical evidence suggests that transgender female patients with pre-existing lipid disorders may benefit from the use of transdermal rather than oral estrogen.

Liver/gallbladder

- Estrogen and cyproterone acetate use may be associated with transient liver enzyme elevations and, rarely, clinical hepatotoxicity.
- Estrogen use increases the risk of cholelithiasis (gall stones) and subsequent cholecystectomy.

Possible Increased Risk:

Type 2 diabetes mellitus

- Feminizing hormone therapy, particularly estrogen, may increase the risk of type 2 diabetes, particularly among patients with a family history of diabetes or other risk factors for this disease.

Hypertension

- Estrogen use may increase blood pressure, but the effect on incidence of overt hypertension is unknown.
- Spironolactone reduces blood pressure and is recommended for at-risk or hypertensive patients desiring feminization.

Prolactinoma

- Estrogen use increases the risk of hyperprolactinemia among transgender female patients in the first year of treatment, but this risk is unlikely thereafter.
- High-dose estrogen use may promote the clinical appearance of preexisting but clinically unapparent prolactinoma.

Inconclusive or No Increased Risk:

Items in this category include those that may present risk, but for which the evidence is so minimal that no clear conclusion can be reached.

Breast cancer

- Transgender female persons who have taken feminizing hormones do experience breast cancer, but it is unknown how their degree of risk compares to that of persons born with female genitalia.
- Longer duration of feminizing hormone exposure (i.e., number of years taking estrogen preparations), family history of breast cancer, obesity (BMI>35), and the use of progestins likely influence the level of risk.

Other Side Effects of Feminizing Therapy:

The following effects may be considered minor or even desired, depending on the patient, but are clearly associated with feminizing hormone therapy.

Fertility and sexual function

- Feminizing hormone therapy may impair fertility.
- Feminizing hormone therapy may decrease libido.
- Feminizing hormone therapy reduces nocturnal erections, with variable impact on sexually stimulated erections.

Risks of Anti-Androgen Medications:

Cyproterone acetate is widely used in Europe, but is not approved for use in the United States because of concerns about hepatotoxicity. Spironolactone is commonly used as an anti-androgen in feminizing hormone therapy, particularly in regions where cyproterone is not approved for use. Spironolactone's common side effects include hyperkalemia, dizziness, and gastrointestinal symptoms.

Hormonal masculinization.

Expected effects of the hormonal masculinization

Hormonal masculinization results in the body changes that better correspond to the patient's gender identity.

The basic masculinization effects are as follows:

Deepened voice, clitoral enlargement (variable), growth in facial and body hair, cessation of menses, atrophy of breast tissue, and decreased percentage of body fat compared to muscle mass.

Most of those physical changes occur over the course of two years. The amount of physical change and the exact timeline of effects can be highly variable.

EFFECTS AND EXPECTED TIME COURSE OF MASCULINIZING HORMONES based on clinical observations (Adapted from Hembree et al. (2009). The Endocrine Society).

Effect	Expected onset	Expected maximum effect
Skin oiliness/acne	1–6 months	1–2 years
Facial/body hair growth	3–6 months	3–5 years
Scalp hair loss	>12 months*	Variable
Increased muscle mass/strength	6–12 months	2–5 years**
Body fat redistribution	3–6 months	2–5 years
Cessation of menses	2–6 months	n/a
Clitoral enlargement	3–6 months	1–2 years
Vaginal atrophy	3–6 months	1–2 years
Deepened voice	3–12 months	1–2 years
* Highly dependent on age and inheritance, may be minimal.		
** Significantly dependent on amount of exercise.		

The degree and rate of physical effects depends in part on the dose, route of administration, and medications used, which are selected in accordance with a patient's specific medical goals and medical risk profile. There is no current evidence that response to hormone therapy – with the possible exception of voice deepening – can be reliably predicted based on age, body habitus, ethnicity, or family appearance. All other factors being equal, there is no evidence to suggest that any medically approved type or method of administering hormones is more effective than any other in producing the desired physical changes.

Examination before initiation of masculinizing hormone therapy and risk assessment

- It is necessary to perform initial evaluation including deliberation with the patient of desired body changes, health condition, medical investigations, risk assessment and laboratory findings. Expected influences of masculinizing hormones and its possible adverse effects including impact on fertility must be discussed also. Important to note that reproductive options should be discussed with the patient before initiation of masculinizing hormone therapy.

- The initial evaluation for hormone therapy assesses a patient’s clinical goals and risk factors for hormone-related adverse events. During the risk assessment, the patient and clinician should develop a plan for reducing risks wherever possible, either prior to initiating therapy or as part of ongoing harm reduction.
- All assessments should include a thorough physical exam, including weight, height, and blood pressure. The need for breast, genital, and rectal exams, which are sensitive issues for most transsexual, transgender, and gender-nonconforming patients, should be based on individual risks and preventive health care needs.
- Depending on a patient’s age and risk profile, there may be appropriate screening tests or exams for conditions affected by hormone therapy. Ideally, these screening tests should be carried out prior to the start of hormone therapy.
- Absolute contraindications to testosterone therapy include pregnancy, unstable coronary artery disease, and untreated polycythemia with a hematocrit of 55% or higher. Because the aromatization of testosterone to estrogen may increase risk in patients with a history of breast or other estrogen dependent cancers, consultation with an oncologist may be indicated prior to hormone use. Comorbid conditions likely to be exacerbated by testosterone use should be evaluated and treated, ideally prior to starting hormone therapy. Consultation with a cardiologist may be advisable for patients with known cardio- or cerebrovascular disease.
- An increased prevalence of polycystic ovarian syndrome (PCOS) has been noted among transgender male patients even in the absence of testosterone use. PCOS is associated with increased risk of diabetes, cardiac disease, high blood pressure, and ovarian and endometrial cancers. Signs and symptoms of PCOS should be evaluated prior to initiating testosterone therapy, as testosterone may affect many of these conditions. Testosterone can affect the developing fetus, and patients at risk of becoming pregnant require highly effective birth control.
- Baseline laboratory values are important to both assess initial risk and evaluate possible future adverse events. Initial labs should be based on the risks of masculinizing hormone therapy, as well as individual patient risk factors, including family history.

RISKS ASSOCIATED WITH MASCULINIZING HORMONE THERAPY

Risk Level	Conditions
Likely increased risk	Polycythemia Weight gain Acne Androgenic alopecia (balding) Sleep apnea
Possible increased risk	Elevated liver enzymes Hyperlipidemia
Possible increased risk with presence of additional risk factors*	Destabilization of certain psychiatric disorders** Cardiovascular disease Hypertension Type 2 diabetes

No increased risk or inconclusive	Loss of bone density Breast cancer Cervical cancer Ovarian cancer Uterine cancer
<p>* Additional risk factors include age.</p> <p>** Includes bipolar, schizoaffective, and other disorders that may include manic or psychotic symptoms. This adverse event appears to be associated with higher doses or supraphysiologic blood levels of testosterone.</p>	

These and some other risks are described in more details below in the **Risks and adverse effects of masculinizing hormone therapy**.

Dynamic control of masculinizing hormone therapy.

In general, clinicians who prescribe hormone therapy should engage in the following tasks:

1. Provide ongoing medical monitoring, including regular physical and laboratory examination to monitor hormone effectiveness and side effects.
2. Communicate as needed with a patient’s primary care provider, mental health professional, and surgeon.
3. If needed, provide patient with a brief written statement indicating that he is under medical supervision and care that includes masculinizing hormone therapy. Particularly during the early phases of hormone treatment, a patient may wish to carry this statement at all times to help prevent difficulties with the police and other authorities.

The aim of medical monitoring during hormone therapy is to evaluate the degree of ongoing body masculinization and to control possible adverse effects appearance.

<p>Monitoring of transgender male persons on cross-hormone therapy <i>Adapted from Hembree et al. (2009). The Endocrine Society.</i></p>
<p>1. Evaluate patient every 2–3 months in the first year and then 1–2 times per year to monitor for appropriate signs of virilization and for development of adverse reactions.</p>
<p>2. Measure serum testosterone every 2–3 months until levels are in the normal physiological male range:</p> <ol style="list-style-type: none"> a. For testosterone enanthate/cypionate injections, the testosterone level should be measured midway between injections. If the level is more than 700 ng/dl or less than 350 ng/dl, adjust dose accordingly. b. For parenteral testosterone undecanoate, testosterone should be measured just before the next injection. c. For transdermal testosterone, the testosterone level can be measured at any time after 1 wk. d. For oral testosterone undecanoate, the testosterone level should be measured 3–5 h after ingestion. e. Note: During the first 3–9 months of testosterone treatment, total testosterone levels may be high, although free testosterone levels are normal, due to high SHBG levels in some biological women.

3. Measure estradiol levels during the first 6 months of testosterone treatment or until there has been no uterine bleeding for 6 months. Estradiol levels should be less than 50 pg/ml.
4. Measure complete blood count and liver function tests at baseline and every 3 months for the first year and then 1–2 times a year. Monitor weight, blood pressure, lipids, fasting blood sugar (if family history of diabetes), and hemoglobin A1c (if diabetic) at regular visits.
5. Consider bone mineral density testing at baseline if risk factors for osteoporotic fracture are present (e.g. previous fracture, family history, glucocorticoid use, prolonged hypogonadism). In individuals at low risk, screening for osteoporosis should be conducted at age 60 and in those who are not compliant with hormone therapy.
6. If cervical tissue is present, an annual pap smear is recommended.
7. If mastectomy is not performed, then mammograms are recommended.

Patients with comorbid medical conditions may need to be monitored more frequently. In the absence of other indications, health professionals may prioritize monitoring for those risks that could be increased by hormone therapy.

The best assessment of hormone efficacy is clinical response. Is a patient developing a masculinized body while minimizing feminine characteristics, consistent with his gender goals? Clinicians can achieve a good clinical response with the least likelihood of adverse events by maintaining testosterone levels within the normal male range while avoiding supraphysiological levels. For patients using intramuscular testosterone cypionate or enanthate, some clinicians check trough levels while others prefer midcycle levels.

Monitoring for adverse events should include both clinical and laboratory evaluation. Follow-up should include careful assessment for signs and symptoms of excessive weight gain, acne, uterine break-through bleeding, and cardiovascular impairment, as well as psychiatric symptoms in at-risk patients. Physical examinations should include measurement of blood pressure, weight, and pulse; and heart, lung, and skin exams. Laboratory monitoring should be based on the risks of hormone therapy described above, a patient’s individual comorbidities and risk factors, and the specific hormone regimen itself.

Medicines, dosages, feminizing therapy regimens.

Below there are reviews of the most broadly used medicines and masculinizing therapy regimens advised by the Endocrine Society Guidelines (Hembree et al., 2009).

Testosterone. Testosterone generally can be given orally, transdermally, or parenterally, although buccal and implantable preparations are also available. Oral testosterone undecanoate, results in lower serum testosterone levels than non-oral preparations and has limited efficacy in suppressing menses. Because intramuscular (im) testosterone cypionate or enanthate are often administered every 2–4 weeks, some patients may notice cyclic variation in effects (e.g., fatigue and irritability at the end of the injection cycle, aggression or expansive mood at the beginning of the injection cycle), as well as more time outside the normal physiologic levels. This may be mitigated by using a lower but more frequent dosage schedule or by using a daily transdermal preparation. Intramuscular testosterone undecanoate maintains stable, physiologic testosterone levels over approximately 12 weeks and has been effective in transgender male individuals. There is evidence that transdermal and intramuscular testosterone achieve similar masculinizing results, although the timeframe

may be somewhat slower with transdermal preparations. Especially as patients age, the goal is to use the lowest dose needed to maintain the desired clinical result, with appropriate precautions being made to maintain bone density.

Other agents. *Progestins*, most commonly medroxyprogesterone, can be used for a short period of time to assist with menstrual cessation early in hormone therapy. GnRH agonists can be used similarly, as well as for refractory uterine bleeding in patients without an underlying gynecological abnormality.

Wide variation in doses and types of hormones have been published in the medical literature. In addition, access to particular medications may be limited by a patient's geographical location and/or social or economic situations. It is strongly recommend that hormone providers regularly gain new information and use those medications that safely meet individual patient needs with available resources.

Approximate masculinizing hormones regimens	
MEDICINE	DOSAGE
Oral: testosterone undecanoate	160–240 mg/d
Parenteral: Testosterone enanthate or cypionate	100–200 mg im every 2 wk or 50% weekly
Parenteral: Testosterone undecanoate *	1000 mg every 12 wk
Transdermal: Testosterone gel 1%	2.5–10 g/d
Transdermal: Testosterone patch	2.5–7.5 mg/d
* 1000 mg initially, followed by an injection at 6 wk, then at 12-wk intervals.	

Risks and adverse effects of masculinizing hormone therapy

All medical interventions carry risks. The likelihood of a serious adverse event is dependent on numerous factors: the medication itself, dose, route of administration, and a patient's clinical characteristics (age, comorbidities, family history, health habits). It is thus impossible to predict whether a given adverse effect will happen in an individual patient.

Likely Increased Risk:

Polycythemia

- Masculinizing hormone therapy involving testosterone or other androgenic steroids increases the risk of polycythemia (hematocrit > 50%), particularly in patients with other risk factors.
- Transdermal administration and adaptation of dosage may reduce this risk.

Weight gain/visceral fat

- Masculinizing hormone therapy can result in modest weight gain, with an increase in visceral fat.

Possible Increased Risk:

Lipids

- Testosterone therapy decreases high density lipids, but variably affects low density lipids and triglycerides. Supraphysiologic (beyond normal male range) serum levels of testosterone, often found with extended intramuscular dosing, may worsen lipid profiles, whereas transdermal administration appears to be more lipid neutral.

– Patients with underlying polycystic ovarian syndrome or dyslipidemia may be at increased risk of worsening dyslipidemia with testosterone therapy.

Liver

– Transient elevations in liver enzymes may occur with testosterone therapy.
– Hepatic dysfunction and malignancies have been noted with oral methyltestosterone. However, methyltestosterone is no longer available in most countries and should no longer be used.

Psychiatric

– Masculinizing therapy involving testosterone or other androgenic steroids may increase the risk of hypomanic, manic, or psychotic symptoms in patients with underlying psychiatric disorders that include such symptoms. This adverse event appears to be associated with higher doses or supraphysiologic blood levels of testosterone.

Inconclusive or No Increased Risk:

Items in this category include those that may present risk, but for which the evidence is so minimal that no clear conclusion can be reached.

Osteoporosis

– Testosterone therapy maintains or increases bone mineral density among transgender male patients prior to oophorectomy, at least in the first three years of treatment. There is an increased risk of bone density loss after oophorectomy, particularly if testosterone therapy is interrupted or insufficient. This includes patients utilizing solely oral testosterone.

Cardiovascular

– Masculinizing hormone therapy at normal physiologic doses does not appear to increase the risk of cardiovascular events among healthy patients.
– Masculinizing hormone therapy may increase the risk of cardiovascular disease in patients with underlying risks factors.

Hypertension

– Masculinizing hormone therapy at normal physiologic doses may increase blood pressure but does not appear to increase the risk of hypertension.
– Patients with risk factors for hypertension, such as weight gain, family history, or polycystic ovarian syndrome, may be at increased risk.

Type 2 diabetes mellitus

– Testosterone therapy does not appear to increase the risk of type 2 diabetes among transgender male patients overall, unless other risk factors are present.
– Testosterone therapy may further increase the risk of type 2 diabetes in patients with other risk factors, such as significant weight gain, family history, and polycystic ovarian syndrome. There are no data that suggest or show an increase in risk in those with risk factors for dyslipidemia.

Breast cancer

– Testosterone therapy in transgender male patients does not increase the risk of breast cancer.

Cervical cancer

– Testosterone therapy in transgender male patients does not increase the risk of cervical cancer, although it may increase the risk of minimally abnormal Pap smears due to atrophic changes.

Ovarian cancer

– Analogous to persons born with female genitalia with elevated androgen levels, testosterone therapy in transgender male patients may increase the risk of ovarian cancer, although evidence is limited.

Endometrial (uterine) cancer

– Testosterone therapy in transgender male patients may increase the risk of endometrial cancer, although evidence is limited.

Other Side Effects of Masculinizing Therapy:

The following effects may be considered minor or even desired, depending on the patient, but are clearly associated with masculinization.

Fertility and sexual function

– Testosterone therapy in transgender male patients reduces fertility, although the degree and reversibility are unknown.

– Testosterone therapy can induce permanent anatomic changes in the developing embryo or fetus.

– Testosterone therapy induces clitoral enlargement and increases libido.

Acne, androgenic alopecia

– Acne and varying degrees of male pattern hair loss (androgenic alopecia) are common side effects of masculinizing hormone therapy.

Clinical situations for feminizing/masculinizing hormone therapy.

There could be different clinical situations, which ask for different approaches in hormones prescribing and specialists involvement into that process.

Bridging

Whether prescribed by another clinician or obtained through other means (e.g., purchased over the Internet), patients may present for care already on hormone therapy. Primary care clinicians can provide a limited (1–6 months) prescription for hormones while helping patients find a provider who can prescribe long-term hormone therapy. Providers should assess a patient's current regimen for safety and drug interactions and substitute safer medications or doses when indicated. If hormones were previously prescribed, medical records should be requested (with the patient's permission) to obtain the results of baseline examinations and laboratory tests and any adverse events. Hormone providers should also communicate with mental health professional who is currently involved in a patient's care. If patients have never had a psychosocial assessment clinicians should refer them to a qualified mental health professional if appropriate and feasible. It is also necessary to ask patients about the presence of the informed consent. Providers who prescribe bridging hormones need to work with patients to establish the duration of bridging therapy.

Hormone maintenance prior to gonad removal.

Once patients have achieved maximal feminizing/masculinizing benefits from hormones (typically two or more years), they remain on a maintenance dose. The maintenance dose is then adjusted for changes in health conditions, aging, or other considerations such as lifestyle changes. When a patient on maintenance hormones presents for care, the provider should assess the patient's current regimen for safety and drug interactions and substitute safer medications or doses when indicated. The patient should continue to be monitored by physical examinations and laboratory testing on a regular basis, as outlined in the literature. The dose and form of hormones should be revisited regularly with any changes in the patient's health status and available evidence on the potential long-term risks of hormones. Hormone therapy may be desirable for those who planned some types of surgery in future.

Hormone therapy following gonad removal.

Hormone replacement with estrogen or testosterone is usually continued lifelong after an oophorectomy or orchiectomy, unless medical contraindications arise. Because hormone doses are often decreased after these surgeries and only adjusted for age and comorbid health concerns, hormone management in this situation is quite similar to hormone replacement in any hypogonadal patient.

Reproductive health of transgender, transsexual and gender nonconforming people.

Many transgender, transsexual, and gender nonconforming people will want to have children. Because feminizing/masculinizing hormone therapy limits fertility, it is desirable for patients to make decisions concerning fertility before starting hormone therapy or undergoing surgery to remove or alter their reproductive organs much less.

Health care professionals should discuss reproductive options with patients prior to initiation of the hormone therapy and surgery even if patients are not interested in these issues at the time of treatment.

If early discussion was not conducted but the person has not had complete sex reassignment surgery, it may be possible to stop hormones long enough for natal hormones to recover, allowing the production of mature gametes.

The wish to hold up or to cease the hormone therapy for the reproductive purposes should not itself be estimated as retransition.

Transgender female patients, especially those who have not already reproduced, should be informed about sperm-preservation options and encouraged to consider banking their sperm prior to hormone therapy. In studies examining testes that were exposed to high-dose estrogen, findings suggest that stopping estrogen may allow the testes to recover. Sperm should be collected before hormone therapy or after stopping the therapy until the sperm count rises again. Cryopreservation should be discussed even if there is poor semen quality. For adult transgender women with azoospermia, a testicular biopsy with subsequent cryopreservation of biopsied material for sperm is possible, but may not be successful.

Reproductive options for **transgender male patients** might include oocyte or embryo freezing. The frozen gametes and embryo could later be used with a surrogate woman to carry to pregnancy. Stopping the testosterone briefly might allow for ovaries to recover enough to release eggs; success likely depends on the patient's age and duration of testosterone treatment. The cases are known when some transgender men are doing exactly that, and some have been able to become pregnant and deliver children.

Reproductive techniques are not available everywhere and can be very costly but people should be informed about their existence. Transsexual, transgender, and gender nonconforming people should not be refused reproductive options for any reason.

For a special group of individuals (for example, prepubertal or pubertal adolescents who will never develop reproductive function in their natal sex due to blockers or cross-gender hormones) there is no technique for preserving function from the gonads at this time.

Other types of medical-social assistance for transgender, transsexual and gender nonconforming people.

In frames of care arrangements aimed at gender affirmation and gender dysphoria alleviation and overcoming, if patient's need and wish is present other types of medical-social assistance for transgender, transsexual and gender nonconforming people could be realized after gender dysphoria evaluation and condition monitoring. This could be a set of manipulations with the decision on their implementation, amount and volume made by the patients themselves relating to their need to overcome discomfort.

Surgery.

Transgender female persons, based on their wish and need, may choose one or more of following interventions: breast/chest surgery (augmentation mammoplasty (implants/lipofilling)), genital surgery (penectomy, orchiectomy, vaginoplasty, clitoroplasty, vulvoplasty), nongenital and nonbreast surgical interventions (facial feminization surgery, liposuction, lipofilling, voice surgery, thyroid cartilage reduction, gluteal augmentation (implants/lipofilling), hair reconstruction, and various aesthetic procedures).

Transgender male persons, based on their wish and need, may choose one or more of following interventions: breast/chest surgery (subcutaneous mastectomy, creation of a male chest), genital surgery (hysterectomy/salpingo-oophorectomy, metoidioplasty, phalloplasty, vaginectomy, scrotoplasty, implantation of erection and/or testicular prostheses), nongenital and nonbreast surgical interventions (liposuction, pectoral implants, and various aesthetic procedures).

Voice and communication therapy.

May include assistance of speech-language pathologists, psychotherapists and vocal coaches.

Urogenital field professionals assistance.

Assistance should be performed in general order considering physical peculiarities followed by initiation or continuation of hormone therapy and/or surgical interventions. Working with transgender, transsexual and gender nonconforming people it is important not only to know about such peculiarities but to be able to provide a *transspecific therapeutic contact* and to follow special ethics procedures (e.g. in case of transgender male patient seeking gynecologist assistance). This is done in order not to become the source of additional traumatic experience but rather to obtain conditions for maximally safe and comfortable care provision.

APPENDICES

to the Manual on providing of medical and social care for transgender, transsexual and gender nonconforming people.

1. Legal base for provision of medical-social care for transgender, transsexual and gender nonconforming people in Kyrgyz Republic.
2. The Application form for the provision of psychological-psychiatric examination.
3. The form of the Decision of medical consultancy committee for psychological-psychiatric examination of transgender, transsexual and gender nonconforming people.
4. Medical conclusion FORM №048/y with the issuance instruction.
5. Informed consent form for the feminizing hormone therapy.
6. Informed consent form for the masculinizing hormone therapy.

APPENDIX 1

Legal base for provision of medical-social care for transgender, transsexual and gender nonconforming people in Kyrgyz Republic.

According to Part 3 of Article 6 of the Kyrgyz Republic Constitution (from June 27th, 2010) international agreements with Kyrgyz Republic participation inured in established order and universally recognized principles and normative of international law are the composite part of the Kyrgyz Republic legal system.

Normative of international agreements on human rights.

Normative of international agreements on human rights have the direct action and priority over normative of other international agreements. It must be noted that at the present time there is no any specific international legal document integrating legal obligations normative for all aspects of life connected with the rights of transgender, transsexual and gender nonconforming people. But the base for such legislative acts is the documents, charts and declarations accepted at international conferences and meetings containing the corresponding recommendations.

First of all these are:

- The Universal Declaration of Human Rights (December 10th, 1948);
<http://cbd.minjust.gov.kg/act/view/ru-ru/17534?cl=ru-ru>
- The International Covenant on civil and political rights (December 16th, 1966). Kyrgyz Republic joined by the Zhogorku Kenesh resolution № 1406-XII at January 12th, 1994;
<http://cbd.minjust.gov.kg/act/view/ru-ru/17581>
- The optional protocol to the International Covenant on civil and political rights (December 16th, 1966); <http://cbd.minjust.gov.kg/act/view/ru-ru/17582>
- The International Covenant on economic, social and cultural rights (December 16th, 1966). Kyrgyz Republic joined by the Zhogorku Kenesh resolution № 1406-XII at January 12th, 1994; <http://cbd.minjust.gov.kg/act/view/ru-ru/17580>
- The International Covenant on elimination of all forms of discrimination against women (December 18th, 1979). Kyrgyz Republic joined by the Zhogorku Kenesh resolutions Z № 320 on January 25th, 1996 and P № 257-1 on March 6th, 1996;
<http://cbd.minjust.gov.kg/act/view/ru-ru/17533?cl=ru-ru>
- The optional protocol to the International Covenant on elimination of all forms of discrimination against women (October 6th, 1999). Kyrgyz Republic joined by the Kyrgyz Republic Law № 72 on April 23rd, 2002.
<http://cbd.minjust.gov.kg/act/view/ru-ru/17442>
http://www.un.org/ru/documents/decl_conv/conventions/womendiscrim_prot.shtml

Human rights in Kyrgyz Republic

Constitution has the primary juridical force and direct action in Kyrgyz Republic. Constitutional laws, laws and other normative legal acts accepted based on the Constitution. The second part of Kyrgyz Republic Constitution is dedicated to rights and liberties of the human and citizen.

Rights of transgender, transsexual and gender nonconforming people cannot be separated. There could be only additional protection of the legal rights by the acceptance of the certain legal standards. According to Part 3 of the Article 16 of the Constitution of KR “Everybody is equal before the law and the court in Kyrgyz Republic” http://www.gov.kg/?page_id=263&lang=ru. It must be noted that they have all the socio-economical, political, personal rights and liberties and also obligations secured by the Constitution of Kyrgyz Republic and legislation of Kyrgyz Republic.

Kyrgyz Republic legislation allows transgender, transsexual and gender nonconforming people to change their gender marker.

UN Committee on the Elimination of Discrimination Against Women recommendations (2015, March 11th):

34. The Committee recommends that the State party:
d) Finalize and adopt an expeditious, transparent and accessible official procedure to change gender marker on the identity documents of transgender women who wish to obtain legal recognition of their gender.

<http://www.ohchr.org/RU/hrbodies/cedaw/pages/cedawindex.aspx>

Legislation of the Kyrgyz Republic

Protection of public health

The protection of public health – is the combination of political, economic, legal, social, cultural, scientific, ecological, medical, sanitary and anti-epidemic arrangements directed at maintaining and strengthening of physical and mental health of every person, provision of health care in case of loss of health.

Main tasks of the Law “On the protection of public health in Kyrgyz Republic” are as follows:

- Realization of the inalienable right of the citizens for protection of their health, life and health of other persons, guaranteed by the Constitution of Kyrgyz Republic
- Definition of rights and obligations of the citizens, separate groups of population in healthcare and the establishment of guarantees of their observance.

Main principles of state policy in the healthcare system in Kyrgyz Republic are also:

- Observation of citizen’s right for health care;
- Social equity, equality, accessibility of medical and preventive assistance.

The Law “On the protection of public health in Kyrgyz Republic” on January 9th, 2005 defines that change/ correction of sexual affiliation is realized in healthcare institutions through medical interventions based on the desire of adult patient in accordance with

biomedical and socio-psychological indications, in order defined by the authorized Kyrgyz Republic state health care institution. <http://cbd.minjust.gov.kg/act/view/ru-ru/1602>

Therefore, transgender, transsexual and gender nonconforming people should pass medical examination in the Republic Center of Mental Health for the establishing of one of the diagnoses of ICD-10 category F64 and get the MCC Medical conclusion FORM №048/y (on the results of the psychological-psychiatric examination for transgender, transsexual and gender nonconforming people) with recommendations for gender marker change to present it at CSAR offices as necessary and sufficient document of the established type for legal gender recognition.

Civil status acts

By the Kyrgyz Republic Government Resolution № 708 (November 17th, 2009) the State registration service under the Kyrgyz Republic Government was formed. That Service incorporates republican agencies which are directly subordinate to the Kyrgyz Republic Government. Thus State registration service under the Kyrgyz Republic Government is the legal successor of the Ministry of Justice of Kyrgyz Republic in the part of civil status acts registration. <http://cbd.minjust.gov.kg/act/view/ru-ru/90347>

By the direction of State registration service under the Kyrgyz Republic Government (June 21st, 2011) the Guidance on the order of civil status acts registration in Kyrgyz Republic was ratified.

According to the Article 155 of that Guidance “changes, additions and corrections in the civil status acts registration is realized in followed cases:

- necessity to correct surname, name and middle name due to the change of sex (in case of hermaphrodites);
- on the base of the conclusion of medical institution that has provided the change of sex.”

This formulation carries juridical collisions: example mentioned in brackets is used incorrectly – it does not match the standards of diagnosing of ICD-10, does not describe the whole spectrum of those who need to change gender marker as the socio-medical arrangement, uses non-ethical wording towards persons.

This Guidance demands obligate broadening of gender marker change foundations including persons matching criteria of ICD-10 F64 category who need the legal gender recognition as medical arrangement in frames of socio-medical assistance for transgender, transsexual and gender nonconforming people.

APPENDIX 2

The Application form for the provision of the psychological-psychiatric examination.

To the chairman
of the RCMH medical consultancy committee
on providing of the psychological-psychiatric examination
for transgender, transsexual and gender nonconforming people

_____ (chairman's name)
from _____ (applicant's name and address)
_____ (passport number, date of issue, issuing institution)

APPLICATION

I am requesting the provision of the psychological-psychiatric examination for me in view of my desire to change gender marker in my identity documents and insisting on its change from the _____ gender marker to the _____ gender marker.

Signature _____

Date _____

APPENDIX 3

The form of the Decision of medical consultancy committee for the psychological-psychiatric examination of transgender, transsexual and gender nonconforming people.

DECISION

of medical consultancy committee for the psychological-psychiatric examination of transgender, transsexual and gender nonconforming people.

Date _____ Registration number _____

Bishkek

Committee consisting of

studied medical documentation of the citizen _____

born _____ at _____
(date of birth) (place of birth)

living at _____
(address)

with passport series _____ № _____
issued _____ by _____,
(date of issue) (issuing institution)

provided psychological-psychiatric examination and established the diagnosis:

(according to the International Classification of Diseases by World Health Organization accepted in Kyrgyz Republic).

Considering the foregoing, committee has decided:

On the base of the application of the citizen

_____ and results of the psychological-psychiatric examination the request should be

_____.
(satisfied/not satisfied – fill in the necessary)

Change of gender marker is recommended from _____ to _____.

Committee chairman: _____
(signature) (signature transcription)

Physician in charge: _____
(signature) (signature transcription)

Committee members: _____

(all Committee members signatures should be transcript).

Place for the seal.

APPENDIX 4

Medical conclusion on the results of the psychological-psychiatric examination for transgender, transsexual and gender nonconforming people, people with gender dysphoria, FORM №048/y.

<p>MINISTRY OF HEALTHCARE OF KYRGYZ REPUBLIC Republic Center of Mental Health</p>	<p>MEDICAL DOCUMENTATION FORM №048/y Approved by the KR MoH Decree № _____ from _____</p>
<p>Medical conclusion (on the decision of medical consultancy committee for the psychological-psychiatric examination of transgender, transsexual and gender nonconforming people, people with gender dysphoria)</p>	
For the citizen _____	_____ (date of birth) _____ (place of birth)
living at _____	_____
with passport series _____ № _____ issued _____ by _____	_____ (date of issue) _____ (address) _____ (issuing institution)
the diagnosis is established _____	
(according to the World Health Organization International Classification of Diseases accepted in Kyrgyz Republic)	
with the recommendation to change gender marker from _____ to _____.	
This conclusion is the reason for the citizen _____	
to address to CSAR services for the provision of all necessary changes in the civil status acts registration and for the issuing of the corresponding identity documents; and to address to medical institutions for hormonal and surgical masculinization/feminization.	
Committee chairman _____	_____ (signature transcription)
Place for the seal	

* This Conclusion is the document of established type to realize the order of change of the passport sex (gender marker) regulated by the Article 38 of the Kyrgyz Republic Law "On the protection of public health in Kyrgyz Republic" (January 9th, 2005).

Instruction for the issuance of the **Medical conclusion on the results of the psychological-psychiatric examination for transgender, transsexual, gender nonconforming people, people with gender dysphoria, FORM №048/y.**

Medical conclusion FORM №048/y is issued based on the results of the psychological-psychiatric examination for transgender, transsexual, gender nonconforming people, people with gender dysphoria.

The order of psychological-psychiatric examination is detailed in the **Guideline on the order of psychological-psychiatric examination** of transgender, transsexual and gender nonconforming people, people with gender dysphoria within frames of the **Manual on provision of medical and social care for transgender, transsexual and gender nonconforming people** for medical professionals of all levels of the Kyrgyz Republic healthcare system and other institutions (admitted by the Expert Council for clinical manuals/protocols quality assessment and approved by the Kyrgyz Republic Ministry of Healthcare Decree № 42 from January 18, 2017.)

Issuance of the **Medical conclusion FORM №048/y** with recommendations for the gender marker change is in the exclusive competence of the Medical consultancy committee (MCC) on the psychological-psychiatric examination at the Republic Center of Mental Health (RCMH) under the Kyrgyz Republic Ministry of Healthcare. The MCC structure and working order are defined by RCMH.

Medical conclusion FORM №048/y on the base of MCC Decision signed by the chairman of the MCC is given to the person that has passed the psychological-psychiatric examination in five working days.

Medical conclusion FORM №048/y is the necessary and sufficient base and the document of the established type for the person with GD to address to the Civil status acts registration Office at the place of residence for adding of necessary changes (name, gender marker) and getting the corresponding identity documents (legal gender recognition).

APPENDIX 5

Informed consent form for the feminizing hormone therapy.

(Page 1)

Registration number:

Date of birth:

Name of the patient (if legal gender recognition is not realized yet both passport and desired name should be indicated):

Feminizing hormone therapy is an important component of transition for transgender female individuals desiring to change their body to affirm gender presentation according with their gender identity. Though there are risks connected to usage of feminizing medicines their appropriate acquisition could significantly improve Your quality of life and psychological well-being.

Before therapy starts it is important for You to know about risks (1) and expected effects (2) of feminizing hormone therapy.

(1). All medical interventions draw certain risks. The whole spectrum of effects and safety of hormonal therapy is unknown yet. Possible adverse effects may include increased risk of Venous thromboembolic disease, Cardiovascular disease and Hypertension, Weight gain, Gallstones, type 2 Diabetes, Hyperprolactinemia or prolactinoma, Hypertriglyceridemia, elevated Liver enzymes and Liver dysfunction, Anaemia, changes in Sexual functioning may occur. Data exists on possible appearance of oncological diseases in the process of hormone therapy particularly Breast cancer.

Some of the listed adverse effects are irreversible. Some of the listed adverse effects may lead to serious menace for health and even could be lethal. Conditions not mentioned may probably occur. Risk of appearance of listed conditions may increase if You have corresponding somatic disorders or additional risk factors. Special attention should be paid to risks connected with smoking and alcohol use.

(2). Hormonal feminization results in body changes that better correspond to Your gender identity. The basic feminization effects are as follows: Breast growth, Body fat redistribution of the female type with increased percentage of body fat compared to muscle mass, decreased Erectile function, decreased Testicular size, softening of Skin and decreased Skin oiliness, thinning and slowed growth of body and facial Hair.

Most of those physical changes occur over the course of two years. The amount of physical change and the exact timeline of effects can be highly variable.

(Page 2)

With my signature below I confirm the following:

- Physician discussed with me the substance and goal of feminizing hormone therapy; benefits and risks including that hormone therapy may not result in expected changes; possible consequences of hormonal therapy; possible additional diagnostic procedures and alternative therapy modes.
- I have read and understood information about hormone therapy and its risks given above.

- I have received from the physician information about fertility and preservation of my reproduction facilities.
- I had enough opportunities to deliberate my condition and care with physician, and I have got my questions answered.
- I consider that I have enough knowledge to give an informed consent for the masculinizing hormone therapy initiation.
- I permit to process my personal information and I give my informed consent for the administration of feminizing hormone therapy to me.

Patient's signature with transcription

Date

Patient's name (according to passport data)

Physician's signature with transcription

APPENDIX 6

Informed consent form for the masculinizing hormone therapy.

(Page 1)

Registration number:

Date of birth:

Name of the patient (if legal gender recognition is not realized yet both passport and desired name should be indicated):

Masculinizing hormone therapy is an important component of transition for transgender male individuals desired to change their body to affirm gender presentation according with their gender identity. Though there are risks connected to usage of masculinizing medicines their appropriate acquisition could significantly improve Your quality of life and psychological well-being.

Before therapy starts it is important for You to know about risks (1) and expected effects (2) of masculinizing hormone therapy.

(1). All medical interventions draw certain risks. The whole spectrum of effects and safety of hormonal therapy is unknown yet. Possible adverse effects may include increased risk of Polycythemia, Cardiovascular disease and Hypertension, Weight gain, Acne, Androgenic alopecia, Sleep apnea (balding), destabilization of certain Psychiatric disorders, type 2 Diabetes, Hyperlipidemia, elevated Liver enzymes and Liver dysfunction, changes in Sexual functioning. loss of Bone density may occur. Data exists on possible appearance of oncological diseases in the process of hormone therapy particularly Breast cancer, Cervical cancer, Ovarian cancer, Uterine cancer.

Some of the listed adverse effects are irreversible. Some of the listed adverse effects may lead to serious menace for health and even could be lethal. Conditions not mentioned may probably occur. Risk of appearance of listed conditions may increase if You have corresponded somatic and/or mental disorders or additional risk factors. Special attention should be paid for risks connected with smoking and alcohol use.

(2). Hormonal masculinization results in body changes that better correspond to Your gender identity. The basic masculinization effects are as follows: increased Muscle mass and strength, Body fat male type redistribution, Skin oiliness and acne, facial and body Hair growth, scalp Hair loss, cessation of Menses, Clitoral enlargement, Vaginal atrophy, deepened Voice.

Most of those physical changes occur over the course of two years. The amount of physical change and the exact timeline of effects can be highly variable.

(Page 2)

With my signature below I confirm the following:

- The physician discussed with me the substance and goal of masculinizing hormone therapy; benefits and risks including that hormone therapy may not result in expected changes; possible consequences of hormonal therapy; possible additional diagnostic procedures and alternative therapy modes.
- I have read and understood information about hormone therapy and its risks given above.

- I have received from the physician information about fertility and preservation of my reproduction facilities.
- I had enough opportunities to deliberate my condition and care with the physician, and I got my questions answered.
- I consider that I have enough knowledge to give an informed consent for the masculinizing hormone therapy initiation.
- I permit to process my personal information and I give my informed consent for the administration of masculinizing hormone therapy to me.

Patient's signature with transcription

Date

Patient's name (according to passport data)

Physician's signature with transcription

Methodological background.

Recent evidential basis (more than 250 sources) of the information used in the manual originally placed in the Standards of care for the health of transsexual, transgender and gender nonconforming people. 7th version. - WPATH, 2011 (point 5 of the following list). Information concerning the hormone therapy contains data from the Endocrine Society clinical practice guideline (point 8). There are also adopted translations of the WPATH SOC (points 1 and 2) and ICD-10 (point 3) in Russian language.

1. Стандарты медицинской помощи транссексуалам, трансгендерам и гендерно неконформным индивидуумам. 7-ая версия. – ВПАЗТ, 2013

http://www.wpath.org/site_page.cfm?pk_association_webpage_menu=1351&pk_association_webpage=3936

2. Международные медицинские стандарты помощи трансгендерным людям/Ред. Бабенко А.Ю., Исаев Д.Д. – СПб.: ЦСИИ «Действие», 2015.

3. Международная классификация болезней (10 пересмотр). Классификация психических и поведенческих расстройств/Перевод под ред. Циркина С.Ю., Нуллера Ю.Л. – Киев: «Сфера», 2005.

4. Опыт взаимодействия специалистов РЦПЗ с пациентами, оказавшимися в поле зрения психиатров по поводу проблем и потребностей, связанных с гендерным несоответствием. Павлова Н.В. – Бишкек, 2016.

5. Standards of care for the health of transsexual, transgender and gender nonconforming people. 7th version. WPATH, 2011.

http://www.wpath.org/site_page.cfm?pk_association_webpage_menu=1351&pk_association_webpage=3926

6. ICD-11 Beta Draft (on the December 5th 2016).

<http://apps.who.int/classifications/icd11/browse/1-m/en#/http%3a%2f%2fid.who.int%2fid%2fentity%2f411470068>

7. Diagnostic and statistic manual of mental disorders: DSM-5. - 5th ed./Arlington, VA, American Psychiatric Association, 2013.

8. Hembree W.C., Cohen-Kettenis P., Delemarre-van de Waal H.A., Gooren L.J., Meyer W.J., Spack N.P., Montori V.M. (2009). Endocrine treatment of transsexual persons: An Endocrine Society clinical practice guideline. *Journal of Clinical Endocrinology & Metabolism*, 94(9).

9. Being Trans in the European Union. – European Union Agency for Fundamental Rights, 2014.

https://fra.europa.eu/sites/default/files/fra-2014-being-trans-eu-comparative-0_en.pdf

10. De Cuypere G., Van Hemelrijck M., Michel A., Caraël B., Heylens G., Rubens R., Monstrey S. Prevalence and demography of transsexualism in Belgium. *European Psychiatry*, 22(3), 2007.

11. Cole C.M., O’Boyle M., Emory L.E., Meyer W.J. (1997). Comorbidity of gender dysphoria and other major psychiatric diagnoses. *Archives of Sexual Behavior*, 26(1).

12. Reed B., Rhodes S., Schofeld P., Wylie K. (2009). Gender variance in the UK: Prevalence,

incidence, growth and geographic distribution. Retrieved from <http://www.gires.org.uk/assets/MedproAssets/GenderVarianceUK-report.pdf>

13. Winter, S. (2009). Cultural considerations for the World Professional Association for Transgender Health's standards of care: The Asian perspective. *International Journal of Transgenderism*, 11(1).

14. Zucker K.J., Bradley S.J., Owen-Anderson A., Kibblewhite S.J., Cantor J.M. (2008). Is gender identity disorder in adolescents coming out of the closet? *Journal of Sex & Marital Therapy*, 34(4).

15. Zucker K.J., Lawrence A.A. (2009). Epidemiology of gender identity disorder: Recommendations for the standards of care of the World Professional Association for Transgender Health. *International Journal of Transgenderism*, 11(1).

