

MSAC Application 1754

Patient consultations and surgical procedures for gender affirmation in adults with gender incongruence

Population

Describe the population in which the proposed health technology is intended to be used:

Individuals experiencing gender incongruence and electing to pursue medical interventions as part of their gender affirmation process.

Specify any characteristics of patients with the medical condition, or suspected of, who are proposed to be eligible for the proposed health technology, describing how a patient would be investigated, managed and referred within the Australian health care system in the lead up to being considered eligible for the technology:

Individuals with a diagnosis of Gender Incongruence of Adolescence and Adulthood (hereafter referred to as gender incongruence) are proposed to be eligible to receive gender affirming medical interventions. Restrictions on being able to access medical interventions relating to gender affirmation based clinical features other than a diagnosis of gender incongruence of adolescence and adulthood are not being requested.

This application requests amendment to some existing MBS items relating to health assessments and development of multidisciplinary care plans. It also requests the creation of a series of new MBS items for gender affirming surgeries. Collectively, the objective of these amendments and additions to the MBS is to facilitate a multidisciplinary best model of care framework for patients pursuing medical interventions for gender affirmation that extends before and after any surgery. The applicants are cognisant that access to hormonal treatments are also an intrinsic part of the care of those with gender incongruence, and that a paired PBAC application will be required to address this component.

The medical interventions accessed will depend on a person's personal choice as to which medical affirmation intervention(s) are right for them. As such, it is not considered informative to consider gender affirming medical interventions as a 'technology' but, rather, a suite of interrelated interventions used for the purposes of medical gender affirmation.

The diagnosis of gender incongruence would be made a person's managing clinician, usually a general practitioner, but sometimes by a sexual health practitioner, endocrinologist or psychiatrist. The diagnostic criteria are outlined in the International Classification of Diseases 11th Revision maintained by the World Health Organization. The classification set out in ICD-11 HA60 Gender incongruence of adolescence or adulthood¹ is provided below.

Gender Incongruence of Adolescence and Adulthood is characterised by a marked and persistent incongruence between an individual's experienced gender and the assigned sex, which often leads to a desire to 'transition', in order to live and be accepted as a person of the experienced gender, through hormonal treatment, surgery or other health care services to make the individual's body align, as much as desired and to the extent possible, with the experienced gender. The diagnosis cannot be assigned prior the onset of puberty. Gender variant behaviour and preferences alone are not a basis for assigning the diagnosis.

¹ <https://icd.who.int/browse11/l-m/en#/http%3a%2f%2fid.who.int%2fcd%2fentity%2f90875286>

The criteria set out in this definition of gender incongruence is anticipated to establish eligibility for practitioners to provide gender affirming medical intervention in Australian clinical practice.

Provide a rationale for the specifics of the eligible population:

Concepts and terminology

Conceptually it is important to understand that “gender incongruence” is the innate state, whereas “gender dysphoria” is the acute distress associated with gender incongruence and varies temporally and with access to treatment.

All individuals with gender incongruence are at risk of suffering gender dysphoria and access to treatment assists in preventing gender dysphoria as well as relieving it. A conceptual parallel within surgical care is the case of women with BRCA2 genetic mutations seeking bilateral mastectomy and reconstructive surgery. Although they do not have breast cancer at that time, offering this surgery is considered reasonable because of their very high risk of breast cancer and the ability of surgery to alleviate that risk. Surgery for these women will also often vary, from mastectomy alone in some cases, to mastectomy and implant reconstruction in others, to mastectomy and microvascular reconstructions in others, and hysterectomy and oophorectomy in others still. Both populations have a very high risk of a severely debilitating disorder and in both cases only a subset will choose to undergo treatment and the treatment plan will vary depending on the individual needs, risk profile and choices of the patient. Clearly this analogy is not perfect, but may assist in understanding concepts relating to the clinical need and patterns of care for people pursuing medical interventions as part of their gender affirmation process.

In the past the trans experience has been conceived of as a binary construct, with the notion that a person is “born in the wrong body” and has the goal to achieve a body which looks like the “opposite” sex / gender. Hence the historic terms “male-to-female” and “female-to-male”. Understanding in this field has now evolved and there is greater recognition of non-binary and other types of gender incongruence. This means that a rigid MtF (trans woman) and FtM (trans man) terminology and associated protocols are no longer aligned with clinical evidence. Some individuals with a diagnosis of gender incongruence will seek limited surgical intervention, some will seek more extensive surgery and some will seek none at all, and furthermore, the extent of treatments may not correlate with their “type” of gender incongruence. This conceptual understanding emphasises the need for individualised and person-centred care, rather than fixed generic protocols of treatment.

Clinical need:

People with gender incongruence or who identify as transgender, as a whole report higher levels of psychiatric conditions than the aged-matched Australian population. A cohort study of 540 transgender people undertaken in Australia reported rates of depression and anxiety in transgender people of 58% and 40% respectively compared with aged-matched Australian population prevalence of 8% and 16% (Cheung et al. 2018).

Transgender and gender diverse people report high rates of suicidal ideation and suicide attempts. The results of a survey of 1,466 transgender and gender diverse people living in Australia revealed that 62% of respondents had suicidal ideation and 10% of respondents attempted suicide in the past 12 months (Hill et al. 2023). People who felt socially excluded due to their

gender identity in the past 12 months were at higher risk of suicide ideation: Odds ratio (No vs Yes): 2.0 (95% CI 1.6, 2.5).

In a survey of nearly a thousand Australian transgender adults the self-reported suicide attempt rate was 10 times higher than that of the general Australian adult population (Zwickl et al. 2021). Critically one of the factors correlated with suicidality was a desire for surgical procedures, implying that barriers to access in Australia may be a variable increasing risk of suicidal ideation.

Gender affirming medical interventions have been reported as reducing rates of psychological distress, suicide ideation and suicide attempt. A survey of transgender and gender diverse people showed that people with a history of gender affirming surgery had significantly lower odds of past month psychological distress and past year suicide ideation and attempt compared with people with no history of gender affirming surgery (Almazan et al. 2021). After adjusting for sociodemographic factors and exposure to other types of gender affirming care the odd ratios (history of gender affirming surgery vs no history of gender affirming surgery) of experiencing the following outcomes were reported:

- Severe psychological distress (past month): 0.58 (95% CI: 0.50, 0.67), $p < 0.001$
- Suicide ideation (past year): 0.56 (0.50, 0.64), $p < 0.001$
- Suicide attempt (past year): 0.64 (0.47, 0.90) $p 0.009$

Gender diverse people have consistently reported lower QOL when compared to cisgender people, and this is more pronounced prior to gender affirming medical interventions (Nobili et al. 2018). Self-reported quality of life is significantly improved in gender diverse people who have undergone gender affirming surgery (Ainsworth et al. 2010, Papadopulos et al. 2021). This finding is consistent despite the heterogeneity of the research covering this topic.

Having legitimised and universal access to gender affirming medical interventions is considered to be an important way to reduce the risk of people with gender incongruence experiencing psychological distress or having suicidal ideation/attempts, improving mental health and improving overall health-related quality of life.

Eligibility and suitability for Medicare funding: The proposed eligibility criteria of individuals having a diagnosis of gender incongruence without additional diagnoses such as concomitant psychological conditions or history of suicidal ideation or attempt is intended to be flexible, in order to meet the diverse needs of people making informed choices to access medical interventions for gender affirmation.

Eligibility for Medicare benefits being payable for gender affirming medical interventions rendered to people with gender incongruence is established by:

- The Health Insurance Act 1973. Part I, Section 3 (Interpretation) of The Health Insurance Act 1973 specifying that:
 - A “clinically relevant service means a service rendered by a medical or dental practitioner or an optometrist that is generally accepted in the medical, dental or optometrical profession (as the case may be) as being necessary for the appropriate treatment of the patient to whom it is rendered”
 - A “professional service” means:

- a) a service (other than a diagnostic imaging service) to which an item relates, being a clinically relevant service that is rendered by or on behalf of the of a medical practitioner”
- Standards of Care for the Health of Transgender and Gender Diverse People, Version 8 (Coleman et al. 2022). These guidelines have been endorsed as a Standard of Care by the Australian Professional Association for Trans Health (AusPATH).²
 - Statement 2.1 of the Standards of Care outline that “we recommend health care systems should provide medically necessary gender-affirming health care for transgender and gender diverse people” ((Coleman et al. 2022), p. 516).
 - The AusPATH public statement on gender affirming health care made 26 June 2021³ which outline that:
 - Gender incongruence is a term used to describe a condition related to sexual health, which may have implications for healthcare such as requiring access to medical gender affirmation; and
 - Gender affirming healthcare is the widely accepted standard in the field (see the list of professional and scientific organisations endorsing this approach at the end of this document). It is a non-judgemental, respectful, shared decision-making model to support a person in their gender in a way that is tailored to their individual needs. Shared decision-making draws on and respects the ability and agency of most clients, including many trans youth, to provide informed consent for their healthcare; and
 - Gender affirming healthcare emphasises affirming language, psychological and peer support, support for social affirmation, and/or medical affirmation (e.g. puberty blockers for young adolescents, or feminising or masculinising hormones and/or surgery for older clients), as medically necessary and clinically relevant.

An assessment of gender incongruence can be made based on the internationally recognised criteria set out in ICD-11 HA60: Gender incongruence of adolescence or adulthood as described previously. For people with gender incongruence, access to gender affirming medical interventions is considered to be medically necessary and clinically relevant by bodies representing medical practitioners. As such, no further ‘diagnosis’ beyond gender incongruence are required for medical interventions for gender affirmation to be eligible to receive Medicare benefits under the definitions set out in The Health Insurance Act 1973.

Some people may experience temporal gender incongruence as part of an acute psychotic episode, or may have another reason for seeking treatment aside from the alleviation of gender incongruence (Coleman et al. 2022). It is important that such circumstance be identified and excluded prior to the initiation of medical interventions for gender incongruence.

Having persistent incongruence is set out as a criterion in ICD-11 HA60 which would be used to established eligibility to access medical interventions for gender affirmation. The length of time of what constitutes ‘persistent’ gender incongruence is self-determined by the patient, however confirmation of a history of gender incongruency and exclusion of reasons for seeking treatment aside from the alleviation of gender incongruence would take place as part of consultations performed prior to the initiation of medical interventions.

² <https://auspath.org.au/standards-of-care/>

³ <https://auspath.org.au/2021/06/26/auspath-public-statement-on-gender-affirming-healthcare-including-for-trans-youth/>

Are there any prerequisite tests?

No

There are no prerequisite diagnostic tests required to establish the presence of gender incongruence.

People experiencing gender incongruence choosing to initiate hormone therapy would usually have blood tests assessing baseline levels of follicle-stimulating hormone, luteinising hormone, oestradiol or total testosterone. Full blood examination, urea and electrolytes and liver function tests may also be performed prior to initiating hormone treatment.

Are the prerequisite tests MBS funded?

Yes

Please provide details to fund the prerequisite tests:

N/A

Intervention

Name of the proposed health technology:

Patient consultations and surgical procedures for gender affirmation in adults with gender incongruence

Describe the key components and clinical steps involved in delivering the proposed health technology:

Some medical interventions for gender affirmation are irreversible, may be associated with a risk of adverse effects, involve complex surgical procedures or have consequences on reproductive options after treatment.

The Standards of Care for the Health of Transgender and Gender Diverse People, Version 8 (Coleman et al. 2022) has been endorsed as a Standard of Care by the Australian Professional Association for Trans Health (AusPATH).⁴ The current Standard of Care recommend that “health care professionals obtain a detailed medical history from transgender and gender diverse people, that includes past and present use of hormones, gonadal surgeries, as well as the presence of traditional cardiovascular and cerebrovascular risk factors with the aim of providing regular cardiovascular risk assessment according to established, locally used guidelines.” (Statement 15.1).

Amendments to select patient consultation MBS items: This application is requesting amendments to some existing MBS items for patient consultations. The objective of this is to support the complex medical needs of people with gender incongruence and to facilitate providing a multidisciplinary model of care when required.

⁴ <https://auspath.org.au/standards-of-care/>

The stages where comprehensive patient consultations and/or multidisciplinary care are most likely to be required are:

- When a person initially engages with a healthcare provider seeking assessment for gender incongruence and advice on support and/or medical interventions.
 - Some individuals who are “gender questioning” will not have gender incongruence, or it will not be persistent. Commencement of medical interventions for these individuals will **not** be appropriate and so it is important to have all necessary expertise to make an accurate diagnosis. For some who are found to meet the diagnostic criteria for ICD-11 HA60: Gender Incongruence of Adolescence and Adulthood, social transition and support may be all that is required, whereas for others medical interventions are appropriate.
 - Examples of activities performed at this stage are: taking a detailed medical history, arranging investigations as required (e.g. pathology assessments), making an overall assessment of the persons clinical needs, discussion of treatment options available, writing referrals to specialists (if required) and providing overall health advice and information.
 - Healthcare professionals that may be involved in consultations with the patient include general practitioners, endocrinologists, psychiatrists, nurse practitioners and sexual health practitioners.
 - Following relevant consultations, the primary provider (normally a general practitioner) should be able to access an item for coordination of and conduction of a multidisciplinary case conference. This will allow discussion on the diagnosis of gender incongruence of adolescence and adulthood vs differential diagnoses and will allow the formulation of a treatment plan, bearing in mind this must be patient-centred and highly informed by patient choice.
- When a person requests referral for gender affirming surgical interventions.
 - Only a minority of those with a diagnosis of gender incongruence will request surgical interventions. For those people it will be important to have the ability to involve specialists in a range of fields.
 - Examples of activities performed at this stage are: consultations to take further specific history and examinations with specialist plastic surgeons, specialist urologists, specialist obstetricians +/- specialist liaison psychiatrists identifying and planning the treatment and services that will be provided by each member of the multidisciplinary team, explaining the expected outcomes and risks of the treatment plan to the patient and preparing a written record of the patients care plan.
 - Healthcare professionals anticipated to provide these consultations and/or participate in multidisciplinary care of a person receiving gender affirming care are: general practitioners, endocrinologists, sexual health practitioners. plastic surgeons, oral and maxillofacial surgeons, ear nose and throat surgeons, urologists, gynaecologists, psychologists or psychiatrists and nurse practitioners.
 - Following relevant consultations, a specialist (normally a plastic surgeon) should be able to access an item for coordination of and participation in a multidisciplinary case conference. This will allow discussion on the specific risks and benefits of surgical gender affirmation, the best options for various surgical interventions, the timing of procedures and the coordination between specialists.

The surgical treatment plan must be patient-centred and highly informed by patient choice.

It is anticipated that routine patient consultations provided to patients by a single medical practitioner (e.g., follow-up for surgery-related complications after gender affirmation surgery) would continue to be provided through existing global patient consultation MBS items without amendment.

MBS items for gender affirming surgeries: Gender affirming surgery refers to a constellation of procedures intended to align a person's body with their gender identity. The number and type of gender affirming surgical procedures accessed by people will depend on their medical suitability for particular procedures, their choices and whether they are pursuing masculinising or feminising procedures.

To ensure access to the most frequently performed gender affirming surgical procedures, a range of new MBS items is being requested. The procedures outlined below for which MBS items are sought are either not funded at all through the MBS, are funded through the MBS with MBS item descriptors preventing their use for gender affirming surgeries or have MBS item descriptors that are a 'poor fit' for performing gender affirming and cause anxiety to doctors using them as to whether they are using the appropriate MBS item.

- Gender affirming chest surgery
 - Feminising chest surgery, by any method, including but not limited to, insertion of prostheses, autologous fat graft or local flaps
 - Masculinising chest surgery without surgical repositioning of the nipple areolar complex
 - Masculinising chest surgery with surgical repositioning of the nipple areolar complex
 - Revision of masculinising or feminising chest surgery
- Genital reconfiguration surgery
 - Penectomy and bilateral orchiectomy (feminising)
 - Construction of neo-vagina by any method using penoscrotal skin (feminising)
 - Construction of neo-vagina by skin grafting around a mould (feminising)
 - Construction of neo-vagina by any method using intestinal segment (feminising)
 - Revision of construction of neo-vagina surgery
 - Hysterectomy with or without salpingo-oophorectomy (masculinising)
 - Construction of neo-phallus by any method using local flaps (masculinising)
 - Construction of neo-phallus by microvascular transfer of free autologous tissue (such as radial forearm flap or antero-lateral thigh flap) (masculinising)
 - Construction of neo-phallus by metoidioplasty (formation of penis from clitoral tissue) (masculinising)
 - Revision of construction of neo-phallus surgery
- Gender affirming facial procedures
 - Feminising/masculinising facial surgery, remodelling of forehead and orbits
 - Feminising/masculinising facial surgery, one or more mandibular osteotomies and mandibular reshaping if undertaken
 - Feminising/masculinising facial surgery, insertion of facial implants or bone grafts
 - Feminising/masculinising facial surgery, soft tissue surgery including skin advancement or local flaps to forehead or lips and including fat grafting
 - Revision of feminising/masculinising facial surgery
- Gender affirming voice surgery

- Chondrolaryngoplasty for gender affirmation (feminising)

Healthcare professionals anticipated to access MBS items associated with gender affirmation surgery are plastic surgeons, oral and maxillofacial surgeons, urologists and ear nose and throat surgeons.

Identify how the proposed technology achieves the intended patient outcomes:

Gender affirmation is an umbrella term encompassing “the personal process or processes a trans or gender diverse person determines is right for them in order to live as their defined gender and so that society recognises this. Gender affirmation may involve social, medical and/or legal steps that affirm a person’s gender.”⁵

The use of hormonal treatment and gender affirming surgeries is intended to allow people with gender incongruence to live as their defined gender.

For people assigned female at birth, masculinising medical interventions for gender affirmation may include:

- Hormonal treatment with testosterone. The use of testosterone facilitates gender affirmation by inducing: changes in body shape and size (increased muscle mass); increasing facial and body hair; deepening the voice; enlarging the genitalia; stopping menstrual periods, and redistribution of body fat from the hips and buttocks to the abdomen.
- Gender affirming surgeries such as breast removal/reduction (mastectomy), removal of reproductive organs (hysterectomy with or without salpingo-oophorectomy), construction of penis (phalloplasty or metoidioplasty), construction of scrotum (scrotoplasty with or without insertion of testicular prosthesis) and masculinising facial procedures.

For people assigned male at birth, feminising medical interventions for gender affirmation may include:

- Hormonal treatment with oestrogen. The use of oestrogen facilitates gender affirmation by inducing: changes in body shape and size (decreased muscle mass); slowing facial and body hair growth; decreasing testicular size, inducing nipple and breast growth, and redistribution of body fat from abdomen to the hips and buttocks.
- Gender affirming surgeries such as breast construction (breast augmentation mammoplasty), removal of the penis and testes (orchidectomy), construction of vagina (vaginoplasty and vulvoplasty), feminising facial procedures, and voice surgery (Chondrolaryngoplasty/tracheal shave).

Does the proposed health technology include a registered trademark component with characteristics that distinguishes it from other similar health components?

No

⁵ https://www.acon.org.au/wp-content/uploads/2020/02/TGD-Language-Guide_2020.pdf

Explain whether it is essential to have this trademark component or whether there would be other components that would be suitable:

N/A

Are there any proposed limitations on the provision of the proposed health technology delivered to the patient (For example: accessibility, dosage, quantity, duration or frequency):

Yes

Provide details and explain:

It is proposed that the requested MBS items for gender affirming medical interventions would be limited to adults.

Australian Standards of Care and Treatment Guidelines for Trans and Gender Diverse Children and Adolescents (Telfer et al., 2020) outline that:

“Current law requires the adolescent’s clinicians to ascertain whether or not an adolescent’s parents or legal guardians consent to the proposed treatment before an adolescent can access either pubertal suppression or hormone treatment. Where there is no dispute between the parents, the adolescent or the medical practitioner, the clinician may proceed on the basis of the adolescent’s consent, where competent to consent, or parental consent, where the adolescent is not competent to consent. Where there is a dispute as to either competence, diagnosis or treatment, court authorisation prior to commencement of treatment is required.”

While there are circumstances in which adolescent’s would legally seek access to medical interventions associated with gender affirmation it is anticipated that Medicare funding of gender affirming interventions would be provided to adults between 18 and 50 years of age in broader clinical practice.

If applicable, advise which health professionals will be needed to provide the proposed health technology:

Patient consultations: General practitioners, plastic surgeons, oral and maxillofacial surgeons, ear nose and throat surgeons, endocrinologists, urologists, gynaecologists, sexual health practitioners, psychologists and psychiatrists. The vast majority of people would not require consultations with all of these practitioner types, rather the extent of interaction with various specialty practitioners will depend on the medical gender affirmation steps chosen by each person.

Gender affirming surgeries: Plastic surgeons, oral and maxillofacial surgeons, urologists and ear nose and throat surgeons.

If applicable, advise whether delivery of the proposed health technology can be delegated to another health professional:

In circumstances where hormonal treatment for gender affirmation was initiated by an endocrinologist or sexual health practitioner and the person receiving treatment was assessed as being stable, ongoing monitoring may be delegated back to the persons general practitioner.

Delegation of monitoring is not expected for all people receiving hormonal treatment and would only occur in circumstances where the prescribing endocrinologist or sexual health practitioner deems it safe to do so and when there is access to a general practitioner with expertise in the use of gender affirming hormonal treatment.

If applicable, advise if there are any limitations on which health professionals might provide a referral for the proposed health technology:

Referrals would not be required for patient consultations provided by a general practitioner.

Many general practitioners have training and experience in providing medical interventions for gender affirmation, including initiating hormonal treatment and providing follow-up monitoring. In circumstances where a general practitioner assesses that initiation of hormonal treatment is more safely provided by a specialty practitioner referral to an endocrinologist or sexual health practitioner may be provided.

People pursuing gender affirming surgery will require referral to a plastic surgeon, oral and maxillofacial surgeon, urologist or ear nose and throat surgeon depending on the type of procedure(s) requested. Referral to these surgeons would be provided by the person primary managing clinician for medical gender affirmation, usually either a general practitioner, endocrinologist or sexual health practitioner.

Some surgeons may require or request a referral from a psychiatrist with expertise in liaison psychiatry prior discussing gender affirming surgeries with people seeking these interventions.

Is there specific training or qualifications required to provide or deliver the proposed service, and/or any accreditation requirements to support delivery of the health technology?

Yes

Provide details and explain:

The medical interventions for gender affirmation for which funding is being requested in this application are already being provided in Australia.

Currently all practitioners providing medical interventions for gender affirmation must meet the training and qualification requirements set out by their professional board prior to becoming a registered health practitioners.

Given the complex nature of gender affirming medical interventions it is proposed that eligibility to claim Medicare rebates for the MBS items proposed in this submission be limited to medical practitioners that are registered specialists (this will include Specialist General Practitioners who may wish to access consultation items).

Indicate the proposed setting(s) in which the proposed health technology will be delivered:
(select all relevant settings)

- Consulting rooms
- Day surgery centre
- Emergency Department

- Inpatient private hospital
- Inpatient public hospital
- Laboratory
- Outpatient clinic
- Patient's home
- Point of care testing
- Residential aged care facility
- Other (please specify)

Patient consultations would take place in the consulting rooms of the practitioner providing the service.

Some gender affirming surgical procedures would be provided at a day surgery centre. More complex procedures and procedures requiring post-surgery care would be provided as an episode of inpatient care at a private hospital or public hospital.

Is the proposed health technology intended to be entirely rendered inside Australia?

Yes

Please provide additional details on the proposed health technology to be rendered outside of Australia:

N/A

Comparator

Nominate the appropriate comparator(s) for the proposed medical service (i.e. how is the proposed population currently managed in the absence of the proposed medical service being available in the Australian health care system). This includes identifying health care resources that are needed to be delivered at the same time as the comparator service:

The objective of this application is to establish a universal funding mechanism for gender affirming medical interventions.

The medical interventions provided through the proposed MBS items are already provided to people undergoing medical gender affirmation in Australia. These interventions are currently funded through a mix of existing MBS items (which are not specific to gender affirmation and do not accurately describe the services provided when rendering gender affirming care), or as out of pocket expense by the person receiving the intervention when there are no suitable MBS items.

The application is not seeking to introduce 'new' medical interventions for gender affirmation that would be used in place of current medical interventions for gender affirmation. Further, the application is not requesting material changes in how people receiving medical interventions for gender affirmation are referred for treatment or managed by clinicians providing care.

As the application is only seeking universal funding of medical interventions for gender affirmation and not a material differences in the type of medical interventions for gender affirmation the comparator nominated is: 'medical interventions for gender affirmation funded by existing non-gender affirmation MBS items or patient out of pocket expenses.'

List any existing MBS item numbers that are relevant for the nominated comparators:

Patient consultations:

MBS items marked with an ‘*’ are currently funded through the MBS but are not able to be used for consultations with people with gender incongruence seeking gender affirming care. This application proposes an amendment to the list of people eligible to have health assessment funded by Medicare to include people with gender incongruence seeking gender affirming care.

MBS items marked with an ‘**’ have Associated Notes (AN.0.47) in the MBS resulting in these items being a ‘poor fit’ for providing consultations or multidisciplinary care to people receiving gender affirming care. This application proposes minor amendments to the Associated Notes or MBS item descriptor for the purposes of legitimising the use of these items for providing gender affirming care.

General practitioners

- Health Assessments: 701*, 703*, 705*, 707*
- Chronic Disease Management/Multidisciplinary Care Plan: 721**, 723**, 729**, 732**

Gender affirming surgeries:

MBS items marked with an ‘*’ are currently funded through the MBS but have item descriptors preventing use for gender affirming surgeries

MBS items marked with an ‘**’ have MBS item descriptors that are a ‘poor fit’ for performing gender affirming surgeries. This causes anxiety to doctors using them as to whether they are using the appropriate MBS item. Further, some of these MBS items describe part of the surgical procedure(s) undertaken when performing the gender affirming surgery and only partially fund the entire service required. This scenario places people in a scenario of being likely to incur high out of pocket expenses for some surgeries.

It should be noted that with the implementation of the Plastic and Reconstructive Surgery Section item number changes of the MBS Review, which has now been announced for 1st July 2023, there will be significant changes in this list and a “worsening of fit” for some procedures, as the Plastic Surgery Clinical Committee of the MBS Review did not consider the needs of people with gender incongruence. The applicants will be able to update the list below once the final items are announced (due to be 1st April 2023).

Gender affirming chest surgery

- Feminising chest surgery, by any method, including but not limited to, insertion of prostheses, autologous fat graft or local flaps: 45528* OR 45060* OR 45535*
- Masculinising chest surgery without surgical repositioning of the nipple areolar complex: 31524 (x2) OR 31525* OR 45520* (x2) OR 45522 (x2)
- Masculinising chest surgery with surgical repositioning of the nipple areolar complex: 31524 (x2) OR 31525* OR 45523*
- Revision of masculinising or feminising chest surgery: No current MBS items

Genital reconfiguration surgery

- Penectomy and bilateral radical orchiectomy: 30642* (x2) AND 37405
- Construction of neo-vagina by any method using penoscrotal skin: 35565**

- Construction of neo-vagina by skin grafting around a mould: 35565* OR 45451
- Construction of neo-vagina by any method using intestinal segment: 35565**
- Revision of construction of neo-vagina surgery: No current MBS items
- Hysterectomy with or without salpingo-oophorectomy: 35750, 35751, 35753, 35754
- Construction of neo-phallus by any method using local flaps: 45006**
- Construction of neo-phallus by microvascular transfer of free autologous tissue: 45562** OR 45564** OR 45565**
- Construction of neo-phallus by metoidioplasty: 37423*
- Revision of construction of neo-phallus surgery: No current MBS items

Gender affirming facial procedures

- Feminising/masculinising facial surgery, remodelling of forehead and orbits: 40600**
- Feminising/masculinising facial surgery, one or more mandibular osteotomies and mandibular reshaping if undertaken: No current MBS items
- Feminising/masculinising facial surgery, insertion of facial implants or bone grafts: 45051*
- Feminising/masculinising facial surgery, soft tissue surgery including skin advancement or local flaps to forehead or lips and including fat grafting: No current MBS items
- Revision of feminising/masculinising facial surgery: No current MBS items

Gender affirming voice surgery

- Chondrolaryngoplasty: 41876, 41879

Please provide a rationale for why this is a comparator:

MBS Guidelines state that “if the proposed therapeutic technology is likely to replace an existing MBS listed service, the relevant comparator would be the existing therapeutic technology” (p. 36).

The current MBS items outlined above describe patient consultations and surgical procedures which may be provided to people receiving medical interventions for gender affirmation. In the event that MBS items establishing a universal funding mechanism for gender affirming medical interventions are created then the use of these items would replace existing MBS listed services which are not specific to gender affirmation.

Some medical interventions used for gender affirmation are either not funded through MBS items (e.g. face surgeries) or are not eligible for funding through the MBS when used for the purposes of gender affirmation (e.g. feminising chest surgery/breast augmentation). Despite the lack of MBS funding these procedures are well-established for the purposes of gender affirmation and are considered to represent ‘standard medical management funded by out of pocket expenses.’

Pattern of substitution – Will the proposed health technology wholly replace the proposed comparator, partially replace the proposed comparator, displace the proposed comparator or be used in combination with the proposed comparator? (please select your response)

None – used with the comparator

Displaced – comparator will likely be used following the proposed technology in some patients

Partial – in some cases, the proposed technology will replace the use of the comparator, but not in all cases

Full – subjects who receive the proposed intervention will not receive the comparator

Please outline and explain the extent to which the current comparator is expected to be substituted:

With the availability of a suite of MBS items specific to gender affirmation surgeries it is expected that all eligible services rendered for the purposes of gender affirmation would be performed using the newly created items in place of existing non-gender affirmation specific MBS items or standard medical management funded by out of pocket expenses.

Outcomes

(Please copy the below questions and complete for each outcome)

List the key health outcomes (major and minor – prioritising major key health outcomes first) that will need to be measured in assessing the clinical claim for the proposed medical service/technology (versus the comparator): (please select your response)

Global assessments of medical gender affirmation

- Health benefits: Change from baseline in health-related quality of life after receiving medical interventions for gender affirmation
- Health benefits: Change from baseline in frequency of psychological disorders after receiving medical interventions for gender affirmation (applicable only in people reporting pre-treatment psychological disorders)
- Health benefits: Change from baseline in frequency of suicidal ideation after receiving medical interventions for gender affirmation (applicable only in people reporting pre-treatment suicidal ideation)
- Health benefits: Change from baseline in frequency of suicidal attempt after receiving medical interventions for gender affirmation (applicable only in people reporting pre-treatment attempt)
- Health benefits: Change from baseline in gender dysphoria after receiving medical interventions for gender affirmation (applicable only in people reporting pre-treatment gender dysphoria)
- Health benefits: Change from baseline in body satisfaction/attitudes/image after receiving medical interventions for gender affirmation
- Health benefits: Patient reported satisfaction/regret after receiving medical interventions for gender affirmation

Treatment-specific assessments: Surgical procedures

- Health benefits: Any of the health benefit (efficacy) outcomes nominated for the global assessment of medical interventions for gender affirmation, plus
- Health harms: Safety signals reported for gender affirming surgical procedures (e.g. rate and nature of surgical complications, rate of revision procedures required after gender affirming surgical procedures)

Outcome description – please include information about whether a change in patient management, or prognosis, occurs as a result of the test information:

Not applicable. The application does not relate to the use of an investigative test.

Proposed MBS items

How is the technology/service funded at present? (for example: research funding; State-based funding; self-funded by patients; no funding or payments):

There is no universal funding program for the range of medical interventions associated with gender affirmation that are being requested for funding through this application.

Some patient consultations and multidisciplinary care conferences would be funded through current MBS items for attendances with general practitioners, specialists, sexual health medicine practitioners and psychiatrists as outlined in the table below.

	Patient consultations	Multidisciplinary care conference, Organise	Multidisciplinary care conference, Attend
General practitioners, complex consultations	23, 36, 44	735, 739, 743	747, 750, 758
Specialists (surgeons, endocrinologists, urologists, gynaecologists)	104, 105, 110, 116	820, 822, 823, 830, 832, 834	825, 826, 828, 835, 837, 838
Sexual health practitioner	6051, 6052, 6057, 6058	6064, 6065, 6067, 6068	6071, 6072, 6074, 6075
Psychiatrists	291, 293, 296, 300, 302, 304, 306	855, 857, 858, 861, 864, 866	825, 826, 828, 835, 837, 838

The current funding arrangements for surgical procedures is highly fragmented. Some procedures may be claimed through existing MBS items (which are not fit-for-purpose) or self-funded, including self-funding treatment overseas.

Hormonal treatment is currently funded through the Pharmaceutical Benefits Scheme (PBS). There is no restriction on clinicians being able to prescribe feminising hormones (estradiol) and anti-androgens through current PBS listings.

The PBS listings for masculinising hormones (testosterone) are ‘Authority Required’ listings and clinicians must contact Services Australia or the Department of Veterans Affairs and obtain approval before a prescription for PBS listed testosterone treatment can be written. It is anticipated that a minor amendment to the clinical criteria for existing PBS restrictions for testosterone for treatment of androgen deficiency to more clearly establish use in people with gender incongruence will be requested through a separate application to the PBAC. The amendment based on PBS codes 11740X, 8619P and 8830R being considered is provided in red text below.

Androgen deficiency

Clinical criteria:

Patient must have an established pituitary or testicular disorder **or gender incongruence.**

Please provide at least one proposed item with their descriptor and associated costs, for each population/Intervention: (please copy the below questions and complete for each proposed item)

Proposed item details: amendments to MBS items for patient consultations

REDACTED

The ASPS supports a funding model for gender affirmation that facilitates a multidisciplinary model of care framework. REDACTED the ASPS initially proposed creating of a suite of new MBS items specifically for patient consultations and multidisciplinary team care that would be used specifically for the provision of gender affirming care.

REDACTED

Amendments to Associated Notes for MBS items for health assessments and the development of chronic disease management plans are proposed. The objective of the proposed amendments is to establish the legitimate the use of existing MBS items to provide a multidisciplinary best model of care.

Proposed amendment to AN.0.36 Health Assessments (MBS items 701, 703, 705 and 707)

MBS items 701, 703, 705 and 707 support health assessments in patient groups with complex medical needs. These have been identified as existing MBS items which would be suitable for use in the context of providing gender affirming care. However, this would require amendment to the list of people eligible to have health assessment funded by Medicare that are outlined in Associated Note (AN.0.36) applicable to these items.

The Associated Note AN.0.36 applicable to health assessments funded through the MBS states that “health assessment means the assessment of a patient's health and physical, psychological and social function and consideration of whether preventive health care and education should be offered to the patient, to improve that patient's health and physical, psychological and social function”. The breadth of health domains considered as part of consultation provided through existing MBS items for health assessments is relevant to the care of people with gender incongruence seeking gender affirming care.

It is proposed that people with gender incongruence receiving gender affirming medical interventions be added as a ‘Target Group’ eligible for health assessments funded through MBS items 701, 703, 705 and 707 in Associated Note AN.0.36 applicable to these items (see bold text below)

Target Group	Frequency of Service
A type 2 diabetes risk evaluation for people aged 40-49 years (inclusive) with a high risk of developing type 2 diabetes as determined by the Australian Type 2 Diabetes Risk Assessment Tool	Once every three years to an eligible patient
A health assessment for people aged 45-49 years (inclusive) who are at risk of developing chronic disease	Once only to an eligible patient
A health assessment for people aged 75 years and older	Provided annually to an eligible patient
A comprehensive medical assessment for permanent residents of residential aged care facilities	Provided annually to an eligible patient
A health assessment for people with an intellectual disability	Provided annually to an eligible patient
A health assessment for refugees and other humanitarian entrants	Once only to an eligible patient
A health assessment for former serving members of the Australian Defence Force	Once only to an eligible patient
A health assessment for people with gender incongruence receiving gender affirming medical interventions	Once every three years to an eligible patient

Proposed amendment to AN.0.47 Chronic Disease Management Items (MBS items 721, 723, 729 and 732)

MBS items 721, 723, 729 and 732 have been identified as suitable for general practitioners to use in developing a management plan and coordinating multidisciplinary care for people receiving gender affirming care. These MBS items are currently limited to chronic disease management or the management of a terminal medical conditions.

An amendment to the to the Regulatory requirements outlined in the Associated Notes (AN.0.47) is proposed to establish the legitimate use of these items in providing gender affirming care (see bold text below).

AN.0.47 Regulatory requirements

Items 721, 723, 729, 731 and 732 provide rebates to manage chronic, or terminal medical conditions **or people receiving gender affirming medical interventions** by preparing, coordinating, reviewing or contributing to chronic disease management (CDM) plans **or multidisciplinary care plans for people receiving gender affirming medical interventions**. They apply for a patient who suffers from at least one medical condition that has been present (or is likely to be present) for at least six months **which may include gender incongruence**, or is terminal.”

Proposed item details: Gender affirming surgeries

A series of new MBS items specifically for gender affirming surgeries is proposed. REDACTED.
REDACTED

The creation of new MBS items for gender affirming surgeries also supports the ‘Complete Medical Service Concept’ described in the MBS Review Taskforce Report for Plastic and Reconstructive Surgery Items.⁶ In this report it is outlined that “the Taskforce has recommended

⁶ <https://www.health.gov.au/sites/default/files/documents/2021/05/taskforce-final-report-plastic-and-reconstructive-surgery-items-taskforce-report-for-plastic-and-reconstructive-surgery-items.pdf>

that each MBS item in the surgical section (T8) of the MBS represents a complete medical service and highlighted that it is not appropriate to claim additional items in relation to a procedure that are intrinsic to the performance of that procedure” (p.20).

Making amendments to existing MBS items which would then be claimed as a series of procedures for the purposes of performing gender affirming surgeries would not be in accordance with the recommendations of the MBS Review Taskforce and is not supported by the ASPS accordingly.

The new MBS items for gender affirming surgeries being requested in this submission are described below.

Gender affirming chest surgery

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Masculinising chest surgery, without surgical repositioning of the nipple-areolar complex in an individual with a diagnosis of gender incongruence
Proposed MBS fee	MBS fees are being developed. These will be based on existing MBS items for similar procedures performed for purposes other than gender affirmation or the time and complexity of performing the procedure if there are no existing MBS items
Indicate the overall cost per patient of providing the proposed health technology	The overall cost per patient undergoing medical gender affirmation will vary substantially based on whether hormonal treatment is used and which surgical procedure(s) are performed
Please specify any anticipated out of pocket expenses	The out of pocket expenses will depend to the fee charged by the surgeon performing the procedure. The applicants has no authority over the fees charged by individual surgeons.

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Masculinising chest surgery, with surgical repositioning or free grafting of the nipple-areolar complex in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Feminising chest surgery, by any method, including but not limited to, insertion of prostheses, autologous fat graft or local flaps in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Feminising / Masculinising chest surgery, revision of, in an individual with a diagnosis of gender incongruence
Proposed MBS fee	MBS fees are being developed. These will be based on existing MBS items for similar procedures performed for purposes other than gender affirmation or the time and complexity of performing the procedure if there are no existing MBS items

Proposed item details: Genital reconfiguration surgery

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Penectomy and bilateral radical orchiectomy, combined, in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Neo-vagina, construction of, by any method using penoscrotal skin in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Neo-vagina, construction of by skin grafting around a mould in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Neo-vagina, construction of, by any method using intestinal segment in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Revision of construction of neo-vagina surgery

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Hysterectomy with or without salpingo-oophorectomy in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Neo-phallus, construction of, by any methods using local flaps in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Neo-phallus, construction of, by microvascular transfer of free autologous tissue (such as radial forearm flap or antero-lateral thigh flap) in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Neo-phallus, construction of by metoidioplasty (formation of penis from clitoral tissue) in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Revision of construction of neo-phallus

Proposed item details: Gender affirming facial procedures

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Feminising / Masculinising facial surgery, remodelling of forehead and orbits in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Feminising / Masculinising facial surgery, one or more mandibular ostectomies and mandibular reshaping if undertaken in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Feminising / Masculinising facial surgery, insertion of facial implants or bone grafts in an individual with a diagnosis of gender incongruence,

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Feminising / Masculinising facial surgery, soft tissue surgery including skin advancement or local flaps to forehead or lips and including fat grafting in an individual with a diagnosis of gender incongruence

Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Facial feminisation / masculinisation surgery, revision of, in an individual with a diagnosis of gender incongruence

Proposed item details: Gender affirming voice surgery

MBS item number (where used as a template for the proposed item)	41876
Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	LARYNX, external operation on, OR LARYNGOFISSURE with or without cordectomy in an individual with a diagnosis of gender incongruence
Proposed MBS fee	\$621.20

MBS item number (where used as a template for the proposed item)	41879
Category number	2
Category description	Therapeutic Procedures
Proposed item descriptor	Tracheoplasty, laryngoplasty or thyroplasty, not by injection techniques, including tracheostomy in an individual with a diagnosis of gender incongruence, other than a service associated with a service to which item 41870 applies (H)
Proposed MBS fee	\$1,006.55

Algorithms

Preparation for using the health technology

Define and summarise the clinical management algorithm, including any required tests or healthcare resources, before patients would be eligible for the proposed health technology:

Gender affirming surgeries

People electing to receive gender affirming surgical procedures would have consultations with general practitioners, endocrinologists, sexual health practitioners, psychiatrists or psychologists to confirm a diagnosis of gender incongruence prior to being considered eligible for gender affirming surgery.

Depending on the nature of the surgery being performed (most commonly genital surgery) some people who are on hormonal treatment may be advised to discontinue treatment for 1-4 weeks before and after surgery to mitigate the risk of venous thromboembolism (Coleman et al. 2022).

A discussion on the risks and expected physiological changes facilitating the provision of informed consent to undergo gender affirming surgeries would be provided prior to any procedure being performed. This would include discussion of the potential for hormonal therapy to impair fertility, with potential referral to preservation services of sperm cryopreservation and oocyte preservation.

Is there any expectation that the clinical management algorithm *before* the health technology is used will change due to the introduction of the proposed health technology?

No

Describe and explain any differences in the clinical management algorithm prior to the use of the proposed health technology vs the comparator health technology:

N/A

Use of the health technology

Explain what other healthcare resources are used in conjunction with delivering the proposed health technology:

Gender affirming surgeries

Health care resources for services provided by anaesthetists, surgical assistants and nurses would be used in episodes of care where a person undergoes a surgical procedure for gender affirmation.

Explain what other healthcare resources are used in conjunction with the comparator health technology:

The application is seeking universal funding of medical interventions for gender affirmation through the MBS and not a material differences in the type of medical interventions for gender affirmation provided. As such, there are differences in the healthcare resource used in conjunction with the comparator health technology (medical interventions for gender affirmation funded by existing non-gender affirmation MBS items or patient out of pocket expenses)

Describe and explain any differences in the healthcare resources used in conjunction with the proposed health technology vs the comparator health technology:

Refer to response to previous question.

Clinical management after the use of health technology

Define and summarise the clinical management algorithm, including any required tests or healthcare resources, *after* the use of the proposed health technology:

Gender affirming surgeries

Following standard post-surgery after care, additional healthcare resources used after a person has received gender affirming surgeries may include:

- Follow-up to assess for evidence of urethral complications in people undergoing construction of a neo-phallus
- Follow-up gynaecological assessment for evidence of granulation tissue, hair and lesions in people undergoing construction of neo-vagina

Define and summarise the clinical management algorithm, including any required tests or healthcare resources, *after* the use of the comparator health technology:

No difference in the healthcare resource used after the comparator health technology (medical interventions for gender affirmation funded by existing non-gender affirmation MBS items or patient out of pocket expenses) are anticipated.

Describe and explain any differences in the healthcare resources used *after* the proposed health technology vs the comparator health technology:

Refer to response to previous question.

Algorithms

Insert diagrams demonstrating the clinical management algorithm with and without the proposed health technology:

Not applicable. The application is seeking universal funding of medical interventions for gender affirmation through the MBS. As there are no material differences in the type of medical interventions for gender affirmation provided the clinical management of patients is not expected to change.

Claims

In terms of health outcomes (comparative benefits and harms), is the proposed technology claimed to be superior, non-inferior or inferior to the comparator(s)? (please select your response)

- Superior
 Non-inferior
 Inferior

Please state what the overall claim is, and provide a rationale:

The medical interventions provided through the proposed MBS items are already provided to people undergoing medical gender affirmation in Australia.

The application is seeking universal funding of medical interventions for gender affirmation through the MBS and not a material differences in the type of medical interventions for gender affirmation provided. As such, the foreshadowed clinical claim is that: medical interventions for gender affirmation fully funded through the MBS are non-inferior to medical interventions for gender affirmation funded by existing non-gender affirmation MBS items or patient out of pocket expenses.

Why would the requestor seek to use the proposed investigative technology rather than the comparator(s)?

Not applicable. The application does not relate to the use of an investigative test.

Identify how the proposed technology achieves the intended patient outcomes:

This information request is a repeat of the request in Intervention section. Please refer to previous response.

For some people, compared with the comparator(s), does the test information result in:
(please highlight your response)

A change in clinical management?	Yes	No
A change in health outcome?	Yes	No
Other benefits?	Yes	No

Not applicable. The application does not relate to the use of an investigative test.

Please provide a rationale, and information on other benefits if relevant:

A petition (Petition EN3307) to then Minister for Health Greg Hunt sought to make gender affirming services eligible for Medicare benefit.⁷ This petition received 148,180 signatures in support of this request which is indicative of broad public support for funding of gender affirming medical interventions facilitated through the requested MBS items.

In responding to this petition then Minister Greg Hunt noted that “to date, no application has been submitted to MSAC to list specific gender affirmation surgery items on the MBS.” This application directly addresses the gap identified by then Minister Hunt as a means to progress making gender affirming services eligible for a Medicare benefit.

In terms of the immediate costs of the proposed technology (and immediate cost consequences, such as procedural costs, testing costs etc.), is the proposed technology claimed to be more costly, the same cost or less costly than the comparator? (please select your response)

- More costly
- Same cost
- Less costly

Provide a brief rationale for the claim:

REDACTED. The full range of gender affirming services are not funded through the MBS, resulting in some services currently funded as out of pocket expenses being replaced by gender affirming services funded by the MBS.

From the perspective of people receiving gender affirming medical interventions having the full range of gender affirming services funded through the MBS would be less. This is because the services currently funded as out of pocket expenses would be eligible to attract a Medicare rebate thereby reducing the cost for people receiving gender affirming medical interventions.

Summary of Evidence

Provide one or more recent (published) high quality clinical studies that support use of the proposed health service/technology. At ‘Application Form lodgement’, please do not attach full text articles; just provide a summary (repeat columns as required).

Identify yet-to-be-published research that may have results available in the near future (that could be relevant to your application). Do not attach full text articles; this is just a summary (repeat columns as required).

⁷ <https://www.aph.gov.au/e-petitions/petition/EN3307>

	Type of study design*	Title of journal article or research project (including any trial identifier or study lead if relevant)	Short description of research (max 50 words)**	Website link to journal article or research (if available)	Date of publication***
1.	Clinical management guideline for hormonal treatment	Position statement on the hormonal management of adult transgender and gender diverse individuals (Cheung et al. 2019)	Describes Australian specific recommendations for hormonal treatment and related management of adult transgender people.	DOI: 10.5694/mja2.50259	2019
2.	Clinical management guideline transgender and gender diverse people	Standards of care for the health of transgender and gender diverse people, Version 8 (Coleman et al. 2022)	Provides comprehensive evidence-based recommendations to healthcare professionals to assist transgender people accessing safe and effective treatment.	DOI: 10.1080/26895269.2022.2100644	2022
3.	Systematic review	A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals (White Hughto et al. 2016)	<p>Presents the results of 3 studies enrolling 247 transgender adults receiving hormonal treatment. The studies measured exposure to hormone therapy and subsequent changes in mental health (e.g., depression, anxiety) and quality of life outcomes at follow-up.</p> <p>Two studies showed a significant improvement in psychological functioning at 3–6 months and 12 months compared with baseline. The third study showed improvements in quality of life outcomes 12 months after initiating hormone therapy for female-to-male and male-to-female participants.</p>	DOI: 10.1089/trgh.2015.0008	2016

	Type of study design*	Title of journal article or research project (including any trial identifier or study lead if relevant)	Short description of research (max 50 words)**	Website link to journal article or research (if available)	Date of publication***
4.	Cross sectional study	Association Between Gender-Affirming Surgeries and Mental Health Outcomes (Almazan et al. 2021)	<p>Data from a survey of 27,715 transgender adults undertaken in the US in 2015 was analysed.</p> <p>Out of 27,715 respondents, 3,559 (13%) reported undergoing at least 1 gender affirming surgery and 16,401 (59%) reported a desire to undergo gender affirming surgery but had not had any procedures.</p> <p>After adjustment for sociodemographic factors and exposure to other types of gender affirming care, undergoing gender affirming surgery was associated with lower past month psychological distress (adjusted odds ratio [aOR], 0.58 (95% CI: 0.50-0.67)); past year suicidal ideation (aOR, 0.56 (95% CI: 0.50-0.64)) and past year suicide attempt (aOR, 0.65 (95% CI: 0.47, 0.90).</p>	DOI:10.1001/jamasurg.2021.0952	2021
5.	Cohort study	Chest surgery in female-to-male transgender individuals (Frederick et al. 2017)	<p>88 transgender people underwent chest surgery for female-to-male gender affirmation. 6/88 (7%) required surgical revision. No infections, wound dehiscence or nipple loss was reported.</p> <p>57/88 of people were very satisfied with the outcome, and 100% would recommend the procedure to other transgender people.</p>	DOI: 10.1097/SAP.0000000000000882	2017
6.	Cross sectional study	Body image in transmen: multidimensional measurement and the effects of mastectomy (Van de Grift et al. 2016)	<p>33 transgender men undergoing mastectomy completed assessments of body image pre-and-post operatively. Before surgery, transmen reported less positive body attitudes and satisfaction, a lower self-esteem and body image-related quality of life compared with cisgender men and women.</p> <p>Mastectomy improved body satisfaction most strongly, although respondents reported improvements in all domains (e.g., decreased dysphoria when looking in the mirror and improved feelings of self-worth).</p>	DOI: 10.1016/j.jsxm.2016.09.003	2016

	Type of study design*	Title of journal article or research project (including any trial identifier or study lead if relevant)	Short description of research (max 50 words)**	Website link to journal article or research (if available)	Date of publication***
7.	Cross sectional study	Hormone therapy, gender affirmation surgery, and their association with recent suicidal ideation and depression symptoms in transgender veterans (Tucker et al. 2018)	Outcomes from 206 self-identified transgender veterans were assessed. Significantly lower levels of suicidal ideation experienced in the past year and 2-weeks were seen in veterans with a history of both hormone intervention and surgery on both the chest and genitals in comparison with those who endorsed a history of no medical intervention, history of hormone therapy but no surgical intervention, and those with a history of hormone therapy and surgery on either (but not both) the chest or genitals when controlling for sample demographics (e.g., gender identity and annual income).	DOI: 10.1017/S0033291717003853	2017
8.	Cohort study	Postoperative complications following primary penile inversion vaginoplasty among 330 male-to-female transgender patients (Gaither et al. 2018)	330 transgender people underwent vaginoplasty for male-to-female gender affirmation. 30/330 (9%) required surgical revision. 95/330 (29%) presented with a post-operative complication. No complications were greater than Clavien-Dindo grade IIIB	DOI: 10.1016/j.juro.2017.10.013	2017
9.	Systematic review	Phalloplasty: a review of techniques and outcomes (Morrison et al. 2016)	<p>Presents aggregated results of 248 articles reporting outcomes for 3,278 people undergoing phalloplasty for female-to-male gender affirmation. Complications were reported for 1,753/3,230 (54%) of procedures.</p> <p>4 articles (n=320 people) reported satisfaction outcomes for metoidioplasty. 298/320 (93%) of respondents were satisfied overall.</p> <p>7 articles (n=168 people) reported satisfaction outcomes for phalloplasty by abdominal flap technique. 96/168 (57%) or respondents were satisfied overall.</p>	DOI: 10.1097/PRS.0000000000002518	2016

* Categorise study design, for example meta-analysis, randomised trials, non-randomised trial or observational study, study of diagnostic accuracy, etc.

**Provide high level information including population numbers and whether patients are being recruited or in post-recruitment, including providing the trial registration number to allow for tracking purposes. For yet to be published research, provide high level information including population numbers and whether patients are being recruited or in post-recruitment.

*** If the publication is a follow-up to an initial publication, please advise. For yet to be published research, include the date of when results will be made available (to the best of your knowledge).

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