Medical Coverage Policy

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Circumcision

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INSTRUCTIONS FOR USE

The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document always supersedes the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Each coverage request should be reviewed on its own merits. Medical directors are expected to exercise clinical judgment where appropriate and have discretion in making individual coverage determinations. Where coverage for care or services does not depend on specific circumstances, reimbursement will only be provided if a requested service(s) is submitted in accordance with the relevant criteria outlined in the applicable Coverage Policy, including covered diagnosis and/or procedure code(s). Reimbursement is not allowed for services when billed for conditions or diagnoses that are not covered under this Coverage Policy (see "Coding Information" below). When billing, providers must use the most appropriate codes as of the effective date of the submission. Claims submitted for services that are not accompanied by covered code(s) under the applicable Coverage Policy

will be denied as not covered. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.

Overview

This Coverage Policy addresses circumcision in males older than 28 days of age (CPT® 54161).

Coverage Policy

Circumcision in an individual older than 28 days of age (CPT® 54161) is considered medically necessary for any of the following indications:

- in conjunction with surgical repair of congenital urethral or penile abnormalities
- unresponsive or recurrent balanitis, balanoposthitis, or lichen sclerosus
- neoplasm of the penis
- paraphimosis
- severe phimosis or unresponsive or recurrent phimosis
- traumatic injury to the foreskin
- recurrent* urinary tract infection (UTI)
- high grade (grade 3 and above) vesicoureteral reflux (VUR)
- sexually active male for the purpose of HIV prevention

*The National Library of Medicine defines recurrent UTI as two or more UTIs in six months.

Circumcision in an individual older than 28 days of age is considered not medically necessary for all other indications.

Health Equity Considerations

Health equity is the highest level of health for all people; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which people are born, grow, live, work, and age.

Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include safe housing, transportation, and neighborhoods; racism, discrimination and violence; education, job opportunities and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

To date, it is estimated that the prevalence of circumcised men is between 12.5% and 33% of the world male population. In Europe, the circumcision rate is low (around 1.5% in England). In the USA, the prevalence of circumcised men is higher among whites than blacks and Hispanics (81% vs. 65% and 54%, respectively).

General Background

Circumcision is the surgical removal of the penis foreskin (prepuce). It is commonly performed shortly after birth in males in the United States (US) based on parental preference, and/or

sociocultural or religious practice. Circumcision after infancy is performed for a variety of reason including but not limited to religious, pathological, for prevention of sexually transmitted disease (STD), sexual dysfunction, or personal preference.

Considerations for the timing of male circumcision:

- Neonatal male circumcision is safer, less expensive, and heals more rapidly than circumcision performed on older boys, adolescent males, and men.
- Most of the health benefits of male circumcision occur after sexual debut (i.e. after becoming sexually active).
- Male circumcision can also be conducted in adulthood when the individual can make the decision for himself. However, male circumcision after sexual debut could result in missed opportunities for:
  - HIV and STI prevention during the window period between sexual debut and circumcision
  - Prevention of UTIs during infancy (CDC, 2014).

CONGENITAL

There are several congenital conditions that effect the penis. Mild conditions that do not impact function may not require treatment. If surgery is indicated, a surgeon may perform circumcision at the time of the repair.

Hypospadias is a condition where the urethra and foreskin don't develop properly. Early in a fetus's development, the urethra starts as an open channel. The channel closes to form a complete tube as a fetus develops before birth and the meatus (opening at the end of the urethra) is at the tip of the penis. In a baby with hypospadias, the urethral tube doesn't close all the way, causing the meatus to form below the tip of the penis. During hypospadias repair, the pediatric urologist will usually:

- straighten the penis and correct any curvature.
- reconstruct the urethra to complete the "tube." This will create a urethral opening near the tip of the penis.
- reconstruct the remaining penis skin and perform a circumcision.

Penile torsion is when a baby's penis appears rotated or twisted. It almost always rotates to the left (counterclockwise). It happens when the skin and connective tissue of the penis don't form as expected while a fetus is developing in the uterus. It's a common congenital condition. Penile torsion can range from mild to severe. In severe penile torsion, a penis may rotate more than 90 degrees. More than half of people with penile torsion have an abnormal urinary stream.
Penile torsion can be a stand-alone medical condition, or it may come with other congenital conditions such as hypospadias and congenital penile curvature (chordee). Penile torsion usually doesn't require treatment, especially if the rotation is less than 90 degrees. Penile torsion treatment involves surgery under general anesthesia. The surgeon may use different surgical methods depending on if other conditions also require treatment, like hypospadias or congenital penile curvature.

Congenital penile curvature is also called 'chordee'. Most congenital penile curvatures are mild and don't require treatment. But in more severe cases, a penis is significantly bent or twisted along the shaft. This may cause pain, urinary dysfunction and/or sexual dysfunction. In these cases, surgery may be necessary.

Frenulum Breve (Short Frenulum) is the fold of skin that connects the head of the penis (glans) to the foreskin on an uncircumcised penis. The purpose of the frenulum is to allow the foreskin to draw back over the glans. If the frenulum is too short, it pulls on the foreskin and causes pain or

discomfort. Most people who have frenulum breve are born with it (congenital). Sometimes, frenulum breve can happen because of other penile disorders.

BALANITIS
Balanitis is defined as inflammation of the glans penis (the tip or head of the penis). Balanoposthitis is inflammation of the glans penis and the prepuce (foreskin). In common usage, "balanitis" and "balanoposthitis" are interchangeable, although balanoposthitis occurs only in uncircumcised males. Most cases of balanitis are due to infection. However, in clinical practice, cases of balanitis may also have no known etiology following diagnostic evaluation. If not treated, the consequences can include acquired phimosis and lichen sclerosus (LS), the treatment of which can often be challenging. While topical antifungal creams can be used to treat each of these, usually accompanied by advice on hygiene, the definitive treatment is circumcision.

Data from meta-analyses showed that circumcised males have a 68% lower prevalence of balanitis than uncircumcised males and that balanitis is accompanied by a 3.8-fold increase in risk of penile cancer. Based on the evidence, circumcision of males, particularly early in life, substantially reduced the risk of penile inflammatory conditions. The clinical and personal burden of penile inflammatory conditions in males can be ameliorated by preventive measures, most notably circumcision. Circumcision is indicated in an individual with unresponsive or recurrent balanitis or balanoposthitis (UpToDate/Barrisford, 2024; UpToDate/Tews, 2024; Morris, et al., 2017). The AUA Statement on Circumcision notes that Properly performed neonatal circumcision prevents phimosis, paraphimosis and balanoposthitis (AUA, 2018).

LICHEN SCLEROSUS
Lichen sclerosus (previously referred to as lichen sclerosus et atrophicus and balanitis xerotica obliterans) is a chronic, inflammatory, idiopathic condition that affects the external genitalia. In males, this hypomelanocytic disease causes a characteristic whitish decoloration of the glans and the foreskin and may cause phimosis and meatal stenosis as well. It is a common cause of phimosis in boys. Early in its course, LS is often asymptomatic. In severe forms of the disease, termed balanitis xerotica obliterans, the fossa navicularis and penile urethra may also be affected, causing urethral stricture. The diagnosis of lichen sclerosus in boys requires a high level of suspicion, and early biopsies should be obtained if suspected. If identified before circumcision or meatotomy, initial treatment should be medical. If the patient fails topical steroid therapy, circumcision and biopsy are the initial recommended surgical approach. Optimally, a biopsy with the first meatotomy establishes the diagnosis (Fox, et al., 2024; UpToDate/Aube-Peterkin, 2023).

The EuroGuiderm guideline on lichen sclerosus (Kirtschig, et al., 2024) states that potent topical corticosteroids are the gold standard of care in men and boys with LS. Co-treatment with emollients is recommended. If standard treatment fails, a surgical intervention is recommended, complete circumcision may cure LS.

NEOPLASM
While the penis can be affected by sarcomas, basal cell carcinomas or even melanoma, Penile Squamous Cell Carcinoma (PSCC) represents approximately 95% of all penile neoplasms. Squamous cell carcinoma in situ of the glans penis and foreskin, named erythroplasia of Queyrat, is a well-circumscribed, erythematous lesion occurring almost exclusively in uncircumcised men (Thumma, et al., 2024; UpToDate/Aube-Peterkin, 2023). The AUA Statement on Circumcision notes that Properly performed neonatal circumcision is associated with a markedly decreased incidence of cancer of the penis among U.S. males (AUA, 2018). The CDC (2014) states Under section on 'Health benefits of elective male circumcision in Adults and Adolescents', that Male circumcision reduces the risk of penile cancer.

The NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) on Penile Cancer (Version 2.2025 — January 6, 2025) states:

- Patients with phimosis carry an increased risk for penile cancer of 25% to 60%. A review of penile SCC in the United States showed that 34.5% of patients had the primary lesion on the glans, 13.2% on the prepuce, and 5.3% on the shaft, with 4.5% overlapping and 42.5% unspecified. Other risk factors include balanitis, chronic inflammation, penile trauma, lack of neonatal circumcision, tobacco use, lichen sclerosus, poor hygiene, and a history of sexually transmitted disease(s), especially human immunodeficiency virus (HIV) and human papillomavirus (HPV). Overall, approximately 45% to 80% of penile cancers are related to HPV.
- For wide local excision, a complete excision of the skin with a wide negative margin with skin grafting is needed. Surgical margins depend on the location of the tumor. Penile tumors of the shaft may be treated with wide local excision, with or without circumcision. Circumcision alone may be reasonable for tumors of the distal prepuce. Circumcision should always precede RT to prevent radiation-related complications.

PARAPHIMOSIS
Paraphimosis refers to a retracted foreskin in an uncircumcised or partially circumcised male that cannot be returned to normal position. Phimosis is defined as a tight foreskin that cannot be retracted to expose the glans penis.

Paraphimosis is caused by foreskin entrapment behind the coronal sulcus. Impairment of lymphatic and venous flow from the constricting ring of foreskin causes venous engorgement of the glans penis with swelling. Ultimately, arterial flow to the glans penis becomes compromised over a period of hours to days. Predisposing factors for paraphimosis may include but is not limited to phimosis/partial phimosis, a male who neglects to replace the foreskin after cleaning or after urination, failure of medical personnel to return a fully retractable foreskin to normal position after cystoscopy or bladder catheterization, sexual activity, penile trauma.

Paraphimosis only occurs in the uncircumcised or partially circumcised male. Successful manual reduction can usually be accomplished by the primary care or emergency physician. If manual paraphimosis reduction is unsuccessful, additional reduction procedures may include manual reduction under general anesthesia, traction with forceps, dorsal slit reduction or emergency circumcision. A dorsal slit or an urgent circumcision may be warranted in cases where manual reduction is unsuccessful, or necrosis of the foreskin has already occurred. Paraphimosis is likely to recur. Elective circumcision may be considered after a resolved case of paraphimosis, especially if phimosis is present, to prevent recurrence. The only way to fully prevent paraphimosis is to be completely circumcised (Leeson, et al., 2025; Cleveland Clinic Health Library, 2025; UpToDate/Diamond, 2024; UpToDate/Aube-Peterkin, 2023; Morris, et al., 2017).

PHIMOSIS
Phimosis is defined as the inability to completely retract the foreskin and expose the glans. This common condition can be congenital (primary, without signs of scarring) or acquired (secondary and pathological); the latter is a consequence of local inflammation (recurrent balanitis or balanoposthitis) or infections due to poor hygiene. Some diseases like diabetes mellitus and lichen sclerosus (LS) could also cause phimosis. It is mostly common in children in the first decade of life with a second peak of incidence occurring after the sixth decade of life. The treatment of phimosis varies depending on the age of the patient and severity of disease.

Physiologic phimosis usually doesn’t need treatment. Pathologic phimosis treatment may initially include a topical corticosteroid cream and antibiotics to treat an underlying infection. Additionally, gradual foreskin stretching exercises may be used. Circumcision is generally recommended if

conservative treatment does not work, phimosis is severe, phimosis is caused by Lichen sclerosus, or phimosis is the cause of painful sexual activity. Circumcision is considered the most effective treatment for phimosis with efficacy estimated at nearly 100% (Cleveland Clinic Health Library, 2025; Rosato, et al., 2024; UpToDate/Aube-Peterkin, 2023; Czajkowski, et al., 2021; Morris, et al., 2017).

RECURRENT URINARY TRACT INFECTIONS / VESICOURETERAL REFLUX (VUR)
Research in the published peer-reviewed literature demonstrates that circumcision substantially reduces the risk of UTI. Literature supports the use of circumcision for males with a past history of recurrent urinary tract infection and high grade (grade 3 and above) vesicoureteral reflux (VUR). Studies have shown a recurrence rate of UTI in preschool children of around 10% in the absence of significant urinary tract abnormality. The recurrence rate increases to 30% in children with vesicoureteral reflux of grade 3 and above. The data do not support the routine circumcision of healthy boys to prevent UTI (Belko, et al., 2024; Chan, et al., 2023; Renko, et al., 2022; Gucuk, et al., 2013; Singh-Grewal, et al., 2005).

The American Academy of Pediatrics (AAP) Subcommittee on Urinary Tract Infection notes that the rate of urinary tract infection (UTI) among febrile infant boys is 4 to 20 times higher in uncircumcised boys is than that for circumcised boys, whose rate of UTI is only 0.2% to 0.4%. The AUA Statement on Circumcision notes that For the first three to six months of life, the incidence of urinary tract infections is at least ten times higher in uncircumcised than circumcised boys (AUA, 2018). The CDC (2014) notes that Male circumcision has been shown to reduce the risk of urinary tract infections in males aged 0–1 years by 90%, in males aged 1–16 years by 85%, and in males >16years by 71%.

The American Urological Association guidelines on Management and Screening of Primary Vesicoureteral Reflux (VUR) in Children (published 2010, amended 2017) notes that for the child with VUR less than one year of age, an 'Option' (not listed as a Recommendation) is circumcision.

- "Circumcision of the infant male with VUR may be considered based on an increased risk of urinary tract infections in boys who are not circumcised compared to those who are circumcised. Although there are insufficient data to evaluate the degree of this increased risk and its duration, parents need to be made aware of this association to permit informed decision-making (Based on review of the data and Panel consensus)."

TRAUMATIC INJURY
Injuries to the male external genitalia may include blunt or penetrating mechanisms (ie, motor vehicle accident, gunshot) that can involve the penis, scrotum, and/or testicle(s). Injury to the anterior urethra is commonly associated. Other blunt (straddle injury, zipper injury) and penetrating mechanisms (animal bites) are less common but do occur. The perineum/external genitalia are commonly burned in conjunction with burns to the remainder of the body; isolated burn injury to the male genitalia is rare. Specific penile injuries, such as penile fracture and penile amputation, are also rare. Circumcision may be required with traumatic injury of the foreskin (UpTodate/Voelzke, 2024; Sallami, et al., 2017).

RISK REDUCTION / PREVENTION
HIV infection in heterosexual men — Male circumcision reduces the risk of heterosexual men becoming infected with HIV. The efficacy of male circumcision to protect that male against HIV infection has been established by several randomized, controlled trials of circumcision conducted in Africa. The trials showed that adult male circumcision significantly reduced the risk for HIV acquisition among heterosexual males by 51%–60%. The three trials were all ended early because of evidence of reduced HIV incidence in the intervention groups. Data from the United States are limited.

HIV infection in MSM — To date, no randomized controlled studies of male circumcision for HIV prevention have been conducted among men who have sex with men (MSM). Observational studies have suggested a possible but uncertain protective effect. Because some (but not all) MSM engage in both insertive and receptive anal intercourse, it is difficult to conduct studies to show a benefit of circumcision in this setting. In a 2009 meta-analysis performed of 15 observational studies among 53,567 MSM (52 percent of whom were circumcised), the odds of having HIV were 14% lower among the circumcised men, but the difference was not statistically significant.

A 2019 meta-analysis reviewed the associations between circumcision and HIV and other STIs among MSM included 62 observational studies and found that circumcision was associated with 23% reduced odds of HIV infection among MSM overall. This association was significantly stronger among MSM in countries of low and middle income compared with MSM in high-income countries. The authors noted that further data is required, given limitations regarding stratification by subcategories of sexual position and differentiating bisexual men from men who have sex exclusively with men. Circumcision was significantly associated with reduced odds of herpes simplex virus (HSV) infection among MSM overall and penile human papillomavirus (HPV) infection among MSM living with HIV (UpToDate/Cohen, 2022; Yuan, et al., 2019; CDC, 2014).

World Health Organization (WHO): The WHO published a guideline in August 2020 titled Preventing HIV Through Safe Voluntary Medical Male Circumcision For Adolescent Boys And Men In Generalized HIV Epidemics Recommendations And Key Considerations. The purpose was to maximize the HIV prevention impact of safe VMMC services and to guide the transition to sustained provision of interventions with a focus on the health and well-being of both adolescent boys and men.

- Voluntary medical male circumcision (VMMC) should continue to be promoted as an additional efficacious HIV prevention option within combination prevention for adolescents 15 years and older and adult men in settings with generalized epidemics to reduce the risk of heterosexually acquired HIV infection (strong recommendation, high quality evidence).

The WHO notes that While the protective effect of VMMC against men's heterosexual acquisition of HIV is well established, the evidence is less clear whether VMMC reduces HIV infection among men who have sex with men (WHO, 2020).

The WHO lists 'Behaviors and conditions that put people at greater risk of contracting HIV'. These include:

- having anal or vaginal sex without a condom
- having another sexually transmitted infection (STI) such as syphilis, herpes, chlamydia, gonorrhea and bacterial vaginosis
- harmful use of alcohol or drugs in the context of sexual behavior
- sharing contaminated needles, syringes and other injecting equipment, or drug solutions when injecting drugs
- receiving unsafe injections, blood transfusions, or tissue transplantation
- medical procedures that involve unsterile cutting or piercing; or accidental needle stick injuries, including among health workers (July 2024).

International Antiviral Society - USA HIV Prevention Recommendations Panel: The panel published recommendations addressing HIV prevention in clinical care settings (Marrazzo, et al., 2014). The objective was to provide current recommendations for the prevention of HIV infection in adults and adolescents for integration in clinical care settings. The IAS-USA HIV Prevention Recommendations Panel was an international panel of experts in HIV biomedical and behavioral science and practice. A systematic review of the literature was conducted. Panel members

reviewed available data and formed recommendations by full-panel consensus. Recommendations regarding Voluntary Medical Male Circumcision include:

- Voluntary medical male circumcision should be recommended to sexually active heterosexual males for the purpose of HIV prevention, especially in areas with high background HIV prevalence. Rating: AIa
- Voluntary medical male circumcision should be discussed with MSM who engage in primarily insertive anal sex, particularly in settings of high HIV prevalence. Rating: BIIb
- Parents and guardians should be informed of the preventive benefits of male infant circumcision. Rating: BIIb

*Ratings
Strength of recommendation
A: Strong support for the recommendation
B: Moderate support for the recommendation
C: Limited support for the recommendation

Quality of evidence
Ia: Evidence from 1 or more randomized controlled clinical trials published in the peer-reviewed literature
Ib: Evidence from 1 or more randomized controlled clinical trials presented in abstract form at peer-reviewed scientific meetings
IIa: Evidence from nonrandomized clinical trials or cohort or case-control studies published in the peer-reviewed literature
IIb: Evidence from nonrandomized clinical trials or cohort or case-control studies presented in abstract form at peer-reviewed scientific meetings
III: Recommendation based on the panel's analysis of the accumulated available evidence

Centers for Disease Control and Prevention (CDC): The CDC published a Notice "Information for Providers to Share with Male Patients and Parents Regarding Male Circumcision and the Prevention of HIV Infection, Sexually Transmitted Infections, and other Health Outcomes" on 12/02/2014.

From the Introduction:
In the United States, African American and Hispanic men have higher risk of HIV infection and lower male circumcision rates than white non-Hispanic males. Similar randomized clinical trials have not been conducted in the United States but based on evidence from the African trials of the efficacy of male circumcision to prevent HIV transmission, uncircumcised heterosexual men living in areas with high HIV prevalence are likely to experience the most risk-reduction benefit from elective male circumcision.

From the Section header Information to Share, it reads:
3A-2 Regardless of their assessed risks (of the patient's risk of acquiring HIV), all uncircumcised adolescent and adult males who engage in heterosexual sex should be informed about the significant, but partial, efficacy of male circumcision in reducing the risk of acquiring HIV and some STIs through heterosexual sex, as well as the potential harms of male circumcision.
Men and male adolescents being provided information about male circumcision should be told that (see Box 1*):

- Male circumcision reduces, but does not eliminate, the risk of acquiring HIV and some STIs during penile-vaginal sex. In clinical trials, medically performed male circumcision reduced the incidence of genital ulcer disease (GUD) by 48% and the prevalence by 47% and reduced the prevalence of HR-HPV by 23%–47% among circumcised men.

- Male circumcision has not been shown to reduce the risk of HIV during receptive anal sex.
- Male circumcision has not been shown to reduce the risk of STIs during anal sex.
- The effect of male circumcision on reducing the risk of HIV and STI transmission during oral sex has not been evaluated.
- Male circumcision has not been shown to reduce the risk of HIV transmission to female partners. However, in clinical trials, medically performed male circumcision reduced the prevalence of GUD by 22%, HR-HPV by 22%, T. *vaginalis* by 45%, and bacterial vaginosis by 40% among female partners.
- Male circumcision has been shown to reduce the risk of urinary tract infections in males aged 0–1 years by 90%, in males aged 1–16 years by 85%, and in males >16years by 71%.
- During adulthood, uncircumcised males are more likely than circumcised males to experience invasive penile cancer.
- After circumcision, men should not have sex until their health care provider has documented wound healing.

3A-3 Uncircumcised, HIV-uninfected men and male adolescents at increased risk for HIV acquisition through heterosexual sex should be provided information about the risk and benefits of male circumcision (See Box 1*). When a decision is made to undergo male circumcision, a referral for surgical consultation and access to medically performed male circumcision surgical services should be provided.

3B-1 Men who have sex with men should be informed that:

- Male circumcision reduces the risk of men acquiring HIV and other STIs during penile-vaginal sex, but no definitive statements can be made about whether male circumcision reduces the risk of sex with men (men who have sex with men/MSM) acquiring HIV and other STIs during penile-anal sex.
- Results from data pooled across several observational studies indicate that among MSM who practice mainly or exclusively insertive anal sex, circumcision was associated with a decreased risk of acquiring a new HIV infection for the insertive partner; however, clinical trials have not included the numbers of MSM necessary to make a definitive conclusion.
- It is biologically plausible that MSM who practice mainly insertive anal sex may experience a reduction in the risk for acquiring HIV and STIs like that among heterosexuals in clinical trials during penile-vaginal sex; among men who practice mainly or exclusively receptive-anal sex, male circumcision does not provide a biologically plausible benefit for a similar reduction in risk.

4-A Parents and guardians should be informed about the medical benefits and risks of neonatal, pediatric, or adolescent medically performed male circumcision (see Box 1*):

- During infancy, circumcised infants are less likely than uncircumcised infants to experience urinary tract infections (UTIs); an estimated 7% of infant males presenting with fever in outpatient clinics and emergency rooms had UTIs, including 20% of uncircumcised febrile infants and 2% of circumcised febrile infants aged younger than3 months of age.21
- An estimated 32% of uncircumcised males compared with 9% of circumcised males will experience a UTI in their lifetime, suggesting that circumcision is associated with a23% absolute decreased lifetime risk of UTI.
- Although most UTIs are treatable, serious complications may occur when UTIs are not diagnosed, recurrent, difficult to treat, or left untreated. Such complications may include sepsis, pyelonephritis, and renal scarring and have been associated with an increased risk for long-term consequences, including hypertension, build-up of kidney waste products (uremia), and end-stage renal disease.

- An estimated 14% of uncircumcised boys compared with 6% of circumcised boys experienced balanitis, irritation, adhesions, phimosis or paraphimosis, suggesting that circumcision is associated with an 8% absolute decreased risk of these conditions.
- During adulthood, circumcised males were less likely than uncircumcised males to experience penile cancer.
- Other anticipated health benefits derive in part from future prevention of HIV and some STIs acquired through heterosexual sex. Eight percent of annual HIV diagnoses in the United States are among persons with infection attributed to heterosexual contact. STIs are very common, with human papilloma virus (HPV) infection of the anus or genitals occurring in many sexually active persons, although HPV vaccination is highly effective against many serotypes. Current risks for either HIV or other non-HIV STIs may not remain constant in the future and the future risk for any individual neonate, child, or adolescent cannot be definitively defined at the time that a circumcision decision is made.
- Considerations for the timing of male circumcision:
  - Neonatal male circumcision is safer, less expensive, and heals more rapidly than circumcision performed on older boys, adolescent males, and men.
  - Most of the health benefits of male circumcision occur after sexual debut (i.e. after becoming sexually active).
  - Male circumcision can also be conducted in adulthood when the individual can make the decision for himself. However, male circumcision after sexual debut could result in missed opportunities for:
    - HIV and STI prevention during the window period between sexual debut and circumcision
    - Prevention of UTIs during infancy.
- Complications of medically performed male circumcision in the United States are typically uncommon and easily managed. Severe complications are rare in all age groups and occur in 0.23% of all circumcised males overall.
  - Among newborns and children aged 1–9 years, most frequently reported complications include bleeding and inflammation of the penis or incomplete wound healing or adhesions requiring corrective procedures. Complications occur in 0.2% of infants aged ≤ 1 month, 0.4% of infants aged<1 year,24 and approximately 9% in children aged 1–9 years.
  - Among persons aged 10 years and older, the most frequently reported complications include those complications reported in younger children as well as wounds of the penis. There are not specific data about the frequency of complications in the adolescent age group (13–18 years). Complications occur in approximately 5% of persons in this age group.
- The American Academy of Pediatrics Taskforce on Circumcision states that the health benefits of newborn male circumcision outweigh the risks and that the benefits of newborn male circumcision justify access to this procedure for families who choose it.

*Box 1
Health Benefits and Risks of Elective Medically Performed Male Circumcision
Health benefits of elective male circumcision in adults and adolescents: • Male circumcision reduces the risk of acquiring HIV infection through penile-vaginal sex by 50%–60%, as demonstrated in 3 well-conducted clinical trials among adult men living in sub-Saharan Africa. • In clinical trials involving heterosexual males living in sub-Saharan Africa, male circumcision reduces the risk of some sexually transmitted infections. ➢ Male circumcision reduces the risk of circumcised men acquiring new infections of: o Genital ulcer disease (GUD) (by 48%)

*Box 1
Health Benefits and Risks of Elective Medically Performed Male Circumcision
○ Herpes simplex virus type-2 (HSV-2) (by 28%–45%) ○ Oncogenic types of human papilloma virus (HPV) (by 24%–47%) ➢ Male circumcision reduces the risk of circumcised men having existing infections of: ○ GUD (by 47%) ○ Oncogenic types of HPV (by 25%–47%) ○ T. *vaginalis* (by 53%) ○ M. *genitalium* (by 46%) ➢ Male circumcision reduces the risk of the female partners of circumcised men having existing infections of: ○ GUD (by 22%) ○ Oncogenic types of HPV (by 22%) ○ T. *vaginalis* (by 45%) ○ Bacterial vaginosis (by 40%) ➢ Male circumcision reduces the risk of penile cancer
Adverse events and risks associated with elective male circumcision of adults: • The rate of adverse events, not including severe adverse events in persons aged 10 years and older is 5%,24 with pain, bleeding, infection and unsatisfactory post-surgical appearance most commonly reported. Severe and/or long-term complications have been reported, but they are so rare that rates of such complications have not been precisely established. • On average, adult men who undergo circumcision generally report minimal or no change in sexual satisfaction or function. Those who enjoy the sensation of the foreskin during sexual relations will no longer experience that sensation.
Health benefits of neonatal male circumcision: • The estimated risk of urinary tract infections (UTIs) in uncircumcised males: ➢ aged 0.1 years is 1.3% (uncircumcised), 0.3% (circumcised) ➢ aged 1–16 years is 2.78% (uncircumcised), 0.4% (circumcised) ➢ aged >16 years is 28.2% (uncircumcised), 8.3% (circumcised) ➢ over a lifetime is 32.1% (uncircumcised), 8.8% (circumcised) • Male circumcision reduces the risk of UTIs in circumcised males: ➢ aged 0–1 years by 90% ➢ aged 1–16 years by 85% ➢ aged >16 years by 71% ➢ over a lifetime by 23% • In the United States, the estimated lifetime risk of penile cancer for males is about 1 in1,400 (0.07%) and that of prostate cancer is about 15%. Neonatal male circumcision reduces the risk of invasive penile carcinoma by about 77% and may reduce the risk of prostate cancer by 15% compared to men who are uncircumcised or those circumcised after first sexual intercourse.
Adverse events and risks associated with neonatal, infant, and child male circumcision performed by clinicians: • In the United States, during 2001-2010, ➢ The rates of reported adverse events, not including severe adverse events, were as follows

*Box 1
Health Benefits and Risks of Elective Medically Performed Male Circumcision
○ 0.4% in infants aged <12 months ○ 9.1% in children age 1–9 years ○ 5.3% in persons aged 10 years and older ➢ Most commonly reported complications among newborns and children aged 1 to 9 years: bleeding and inflammation of the penis or incomplete wound healing or adhesions requiring corrective procedures. • The incidence of severe adverse events associated with male circumcision performed by clinicians, such as permanent disabilities, disfigurements, and death are rare. Other major complications requiring intervention such as major bleeding, and severe infection, are uncommon. • Some men enjoy the sensation of the foreskin during sexual relations, and such a sensation will not be experienced after circumcision; however, the bulk of scientific evidence states that men, on average, do not experience a loss of sexual pleasure or function because of circumcision.

American Academy of Pediatrics (AAP): The American Academy of Pediatrics (AAP, 2012) published a Policy Statement in 2012 on male circumcision. The AAP indicates that preventive health benefits of elective circumcision of male newborns outweighs the risks of the procedure. Benefits include significant reductions in the risk of urinary tract infection in the first year of life and, subsequently, in the risk of heterosexual acquisition of HIV and the transmission of other sexually transmitted infections.

Cochrane Review: Wiysonge et al. (2011) authored a Cochrane Review titled 'Male circumcision for prevention of homosexual acquisition of HIV in men'. The authors concluded: Current evidence suggests that male circumcision may be protective among men who have sex with men (MSM) who practice primarily insertive anal sex, but the role of male circumcision overall in the prevention of HIV and other sexually transmitted infections among MSM remains to be determined. Therefore, there is not enough evidence to recommend male circumcision for HIV prevention among MSM at present. Further research should be of high quality and further explore interaction with the predominant sexual role.

Siegfried et al. (2009) authored a Cochrane Review titled 'Male circumcision for prevention of heterosexual acquisition of HIV in men'. The authors concluded: We found insufficient evidence to support an interventional effect of male circumcision on HIV acquisition in heterosexual men. The results from existing observational studies show a strong epidemiological association between male circumcision and prevention of HIV, especially among high-risk groups. The review found that men who have already been circumcised have lower rates of HIV infection than uncircumcised men. However, there is no strong evidence of the effects of male circumcision to try to reduce the spread of HIV/AIDS.

Medicare Coverage Determinations

	Contractor	Determination Name/Number	Revision Effective Date
NCD	National	No determination found	
LCD		No determination found	

Note: Please review the current Medicare Policy for the most up-to-date information.
(NCD = National Coverage Determination; LCD = Local Coverage Determination)

Coding Information

Notes:

1. This list of codes may not be all-inclusive since the American Medical Association (AMA) and Centers for Medicare & Medicaid Services (CMS) code updates may occur more frequently than policy updates.
2. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Considered Medically Necessary when criteria in the applicable policy statements listed above are met:

CPT®* Codes	Description
54161	Circumcision, surgical excision other than clamp, device, or dorsal slit; older than 28 days of age

***Current Procedural Terminology (CPT®) ©2024 American Medical Association: Chicago, IL.**

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Revision Details

Type of Revision	Summary of Changes	Date
Initial Review	• New policy statement	5/15/2025