



BlueCross BlueShield
of Alabama

Name of Blue Advantage Policy:

**Levonorgestrel-releasing Intrauterine System (LNG-IUS) (Mirena®)
for Heavy Menstrual Bleeding**

Policy #: 209
Category: OB/GYN Reproductive

Latest Review Date: April 2020
Policy Grade: A

BACKGROUND:

Blue Advantage medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:

1. *Safe and effective;*
2. *Not experimental or investigational*;*
3. *Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:*
 - *Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;*
 - *Furnished in a setting appropriate to the patient's medical needs and condition;*
 - *Ordered and furnished by qualified personnel;*
 - *One that meets, but does not exceed, the patient's medical need; and*
 - *At least as beneficial as an existing and available medically appropriate alternative.*

Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill **Original Medicare for covered services that are related to **clinical trials** that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).*

POLICY:

For dates of service on or after March 24, 2020:

Blue Advantage will treat levonorgestrel-releasing intrauterine system (LNG-IUS (Mirena®)) as a covered benefit for the following medical conditions:

- Idiopathic menorrhagia
- Dysfunctional uterine bleeding
- Premenopausal menorrhagia
- Adenomatous hyperplasia
- Metrorrhagia

Blue Advantage will treat the use of any other levonorgestrel intrauterine systems (LNG IUS) devices, other than Mirena®, for non-contraceptive use as a non-covered benefit and investigational.

Effective for dates of service February 26, 2018, through March 23, 2020, refer to LCD L36954.

Effective for dates of service prior to February 26, 2018:

Blue Advantage will treat Levonorgestrel-releasing intrauterine system (LNG-IUS (Mirena®)) as a covered benefit for the following medical conditions:

- Idiopathic menorrhagia
- Dysfunctional uterine bleeding
- Premenopausal menorrhagia
- Adenomatous hyperplasia
- Metrorrhagia

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

DESCRIPTION OF PROCEDURE OR SERVICE:

Levonorgestrel-releasing intrauterine system (LNG-IUS), (Mirena®), is a device that releases levonorgestrel into the uterine cavity at a rate of approximately 20mcg per day for five years. It is indicated for intrauterine contraception for up to five years. It may also cause significant reduction in menstrual blood loss, thus it has been used for the treatment of menorrhagia and

dysfunctional uterine bleeding. It has also been used to treat endometrial hyperplasia, as an effective method for suppression of the endometrium and as an alternative to hysterectomy.

KEY POINTS:

The most recent literature search was conducted through April 2, 2020.

Summary of Evidence

For women who are experiencing heavy menstrual bleeding and receive a levonorgestrel releasing IUS (i.e. Mirena), the evidence consists of meta-analyses and randomized controlled trials. The primary endpoints were quality of life, safety, and surgical reinterventions. Overall, studies have shown more patient satisfaction with LNG-IUDs compared to medical treatment. In a systematic review and meta-analysis conducted, the LNG-IUS was superior to conventional medical treatment in reducing menstrual blood loss and more women were satisfied with the LNG-IUS than with the use of conventional medical treatment. In other trials, the LNG-IUS group was more satisfied compared to medical treatment. The evidence is sufficient to determine that the device results in a meaningful improvement in the net health outcome.

Practice and Position Statements

In January 2010 (reaffirmed in 2018), the American College of Obstetricians and Gynecologist (ACOG) replaced Committee Opinion number 337 (Noncontraceptive uses of the Levonorgestrel Intrauterine System) with a Practice Bulletin (Number 110), “Noncontraceptive uses of Hormonal Contraception.” Per the bulletin, “The levonorgestrel intrauterine system is a highly effective contraceptive method with significant noncontraceptive benefits in women with excessive menstrual bleeding and dysmenorrhea. Numerous studies have confirmed the effectiveness of the levonorgestrel intrauterine system for reduction of menstrual blood loss from idiopathic menorrhagia, adenomyosis, leiomyomas, pain due to endometriosis and hemostatic disorders with commensurate reduction in dysmenorrhea and anemia.”

KEY WORDS:

Mirena[®], levonorgestrel-releasing intrauterine system, LNG-IUS, menorrhagia, premenopausal menorrhagia, endometrial hyperplasia, adenomatous hyperplasia, dysfunctional uterine bleeding, hysterectomy, IUS, menstrual bleeding, heavy menstrual bleeding

APPROVED BY GOVERNING BODIES:

The FDA approved Mirena[®] (levonorgestrel-releasing intrauterine device) in December 2000 as a hormone-releasing system for intrauterine contraception.

The FDA approved Mirena[®] (levonorgestrel-releasing intrauterine device) October 1, 2009 for the treatment of heavy menstrual bleeding in women who use intrauterine contraception as a method of pregnancy prevention.

BENEFIT APPLICATION:

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable. The use of this device for contraceptive management is a group specific benefit.

CURRENT CODING:**CPT codes:**

58300	Insertion of intrauterine device (IUD)
--------------	--

HCPCS codes:

J7298	Levonorgestrel-releasing intrauterine contraceptive system (Mirena), 52mg
S4981	Insertion of levonorgestrel-releasing intrauterine system

REFERENCES:

1. American College of Obstetricians and Gynecologists. Noncontraceptive uses of the levonorgestrel intrauterine system. ACOG Committee Opinion No. 337. Obstet Gynecol 2006;107:1479-82.
2. American College of Obstetricians and Gynecologists. Non Contraceptive uses of Hormonal Contraception. Number 110. Jan 2010. Replaces Committee Opinion Number 337, June 2006).
3. Barrington JW, et al. Comparison between the levonorgestrel intrauterine system (LNG-IUS) and thermal balloon ablation in the treatment of menorrhagia, European Journal of Obstetrics, Gynecology, and Reproductive Biology, May 2003; 108(1): 72-74.
4. de Souza SS, Camargos AF, de Rezende CP, et al. A randomized prospective trial comparing the levonorgestrel-releasing intrauterine system with thermal balloon ablation for the treatment of heavy menstrual bleeding. Contraception. 2010 Mar;81(3):226-31.
5. Endrikat J, Shapiro H, Lukkari-Lax E, et al. A Canadian, multicentre study comparing the efficacy of a levonorgestrel-releasing intrauterine system to an oral contraceptive in women with idiopathic menorrhagia. J Obstet Gynaecol Can. 2009 Apr;31(4):340-7.
6. Gupta J, Kai J, Middleton L, et al. Levonorgestrel intrauterine system versus medical therapy for menorrhagia. N Engl J Med. 2013 Jan 10;368(2):128-37.
7. Heliövaara-Peippo S, Halmesmäki K, Hurskainen R, et al. The effect of hysterectomy or levonorgestrel-releasing intrauterine system on lower abdominal pain and back pain among women treated for menorrhagia: a five-year randomized controlled trial. Acta Obstet Gynecol Scand. 2009;88(12):1389-96.
8. Hurskainen R, et al. Clinical outcomes and costs with the levonorgestrel-releasing intrauterine system or hysterectomy for treatment of menorrhagia: Randomized trial 5-year follow-up, The Journal of the American Medical Association, March 2004; 291(12): 1503-1504.
9. Hurskainen R, et al. Levonorgestrel-releasing intrauterine system for menorrhagia improved quality of life but cost less than hysterectomy, Evidence-Based Obstetrics and Gynecology, March 2002, Vol. 4, No. 1.

10. Hurskainen R, et al. Levonorgestrel-releasing intrauterine system or hysterectomy in the treatment of essential menorrhagia: Predicts of outcome, Acta Obstetrica at Gynecologica Scandinavica, April 2004; 83(4): 401-403.
11. Kai J, Middleton L, Daniels J, et al. Usual medical treatments or levonorgestrel-IUS for women with heavy menstrual bleeding: long-term randomized pragmatic trial in primary care. Br J Gen Pract. 2016 Dec;66(653):e861-e870.
12. Kaunitz AM, Bissonnette F, Monteiro I, et al. Levonorgestrel-releasing intrauterine system or medroxyprogesterone for heavy menstrual bleeding: a randomized controlled trial. Obstet Gynecol. 2010 Sep;116(3):625-32.
13. Kaunitz AM, Meredith S, Inki P, et al. Levonorgestrel-releasing intrauterine system and endometrial ablation in heavy menstrual bleeding: a systematic review and meta-analysis. Obstet Gynecol. 2009 May; 113(5): 1104-16.
14. Marjoribanks J, Lethaby A, Farquhar C. Surgery versus medical therapy for heavy menstrual bleeding. Cochrane Database Syst Rev. 2016 Jan 29;(1):CD003855.
15. Maybin JA, Critchley HO. Medical management of heavy menstrual bleeding. Womens Health (Long). 2016 Jan;12(1): 27-34.
16. Nagrani R, et al. Can the levonorgestrel intrauterine system replace surgical treatment for the management of menorrhagia?, BJOG: An International Journal of Obstetrics and Gynecology, March 2002; 109(3): 345-347.
17. Stewart A, et al. The effectiveness of the levonorgestrel-releasing intrauterine system in menorrhagia: A systematic review, British Journal of Obstetrics and Gynecology, January 2001, Vol. 108, pp. 74-86.
18. Vereide AB, et al. Nuclear morphometric changes and therapy monitoring in patients with endometrial hyperplasia: A study comparing effects of intrauterine levonorgestrel and systemic medroxyprogesterone, December 2003; 91(3): 526-533.
19. Wildemeersch D, et al. Development of a miniature, low-dose, frameless intrauterine levonorgestrel-releasing system for contraception and treatment: A review of initial clinical experience, Molecular Cancer Therapeutics, January 2002; 4(1): 71-82.
20. Wildemeersch D and Schacht E. The effect on menstrual blood loss in women with uterine fibroids of a novel “frameless” intrauterine levonorgestrel-releasing drug delivery system: A pilot study, European Journal of Obstetrics, Gynecology, and Reproductive Biology, April 2002; 102(1): 74-79.
21. Wildemeersch D and Schacht E. Treatment of menorrhagia with a novel ‘frameless’ intrauterine levonorgestrel-releasing drug delivery system: A pilot study, European Journal of Contraception and Reproductive Health Care, June 2001; 6(2): 93-101.
22. Wildemeersch D and Dhont M. Treatment of nonatypical and atypical endometrial hyperplasia with a levonorgestrel-releasing intrauterine system, American Journal of Obstetrics and Gynecology, May 2003, Vol. 188, No. 5.
23. Xiao B, et al. Therapeutic effects of the levonorgestrel-releasing intrauterine system in the treatment of idiopathic menorrhagia, Fertility and Sterility, April 2003; 79(4): 963-969.

POLICY HISTORY:

Adopted for Blue Advantage, March 2005

Available for comment May 1-June 14, 2005

Medical Policy Group, October 2007
Medical Policy Group, January 2009
Available for comment January 14-February 27, 2009
Medical Policy Group, October 2009
Medical Policy Group, January 2013
Medical Policy Group, February 2016
Medical Policy Group, April 2016
Medical Policy Group, February 2018
Medical Policy Group, April 2020: Reinstated policy effective March 24, 2020.

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.