# PHC & AHL: Obstetrics & Gynaecology PHC: Family Planning



National Department of Health



Affordable Medicines Directorate Essential Drugs Program



Primary Healthcare Standard Treatment Guidelines – 2020-4 Review cycle Adult Hospital level Standard Treatment Guidelines – 2020-4 Review cycle



Department: Health REPUBLIC OF SOUTH AFRICA





#### <u>Evidence</u>

Please access the National Essential Medicines List Committee (NEMLC) report for detailed evidence (including rationale, references and costings) informing decision-making on medicine addition, amendments and deletions:

NHI Website: <u>https://www.health.gov.za/nhi-edp-stgs-eml</u> Knowledge Hub: <u>www.knowledgehub.health.gov.za/e-library</u>

### **Disclaimer**

This slide set is an implementation tool and should be used alongside the most recently published STG available on the Knowledge Hub. This information does not supersede or replace the STG itself.



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# **Presentation Outline**



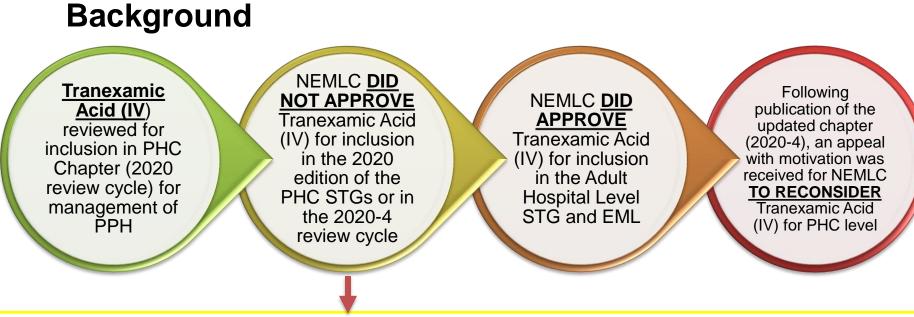
1	Tranexamic Acid for Postpartum Haemorrhage (PPH) at PHC Level
2	<ul> <li>Aspirin for reducing onset of pre-eclampsia in high risk patients at PHC level</li> </ul>
3	<ul> <li>TDF Prophylaxis for Hepatitis B positive, HIV negative Pregnant Women</li> </ul>
4	Progesterone for Pre-term labour (recap from previous edition)
5	• Levonorgestrel intra-uterine device (LNG- IUD) (PHC CH7: Family Planning)





# Use of Tranexamic Acid IV for the management of postpartum haemorrhage at PHC level





#### **Reasons for exclusion:**

- "The composite primary endpoint of death from all causes or hysterectomy was not reduced with tranexamic acid (534 [5·3%] deaths or hysterectomies in the tranexamic acid group vs 546 [5·5%]in the placebo group, RR 0·97, 95% CI 0·87-1·09; p=0·65)"; statistically not significant.
- Generalisability of the results of the WOMANS\* Trial to the local primary health care setting was not possible, as the trial was conducted in an emergency hospital setting.
- · Referral to higher level of care for appropriate management from primary level may be delayed.
- Price was a major consideration



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WOMAN Trial Collaborators. Effect of early tranexamic acid administration on mortality, hysterectomy, and other morbidities in women with post-partum haemorrhage (WOMAN): an international, randomised, double-blind, placebocontrolled trial. Lancet. 2017 May 27;389(10084):2105-2116. doi: 10.1016/S0140-6736(17)30638-4. Epub 2017 Apr 26. Erratum in: Lancet. 2017 May 27;389(10084):2104. doi: 10.1016/S0140-6736(17)31220-5. PMID: 28456509; PMCID: PMC5446563.



# Use of Tranexamic Acid IV for the management of PPH at PHC level



# **Motivation**

In 2023, a motivation to include TXA, IV at PHC level was received arguing that it is reasonable to extrapolate the WOMAN trial findings to the PHC level and that the total price of the TXA, IV in the original review was incorrectly calculated.

**NEMLC recommended that:** 

1. Previous deliberations be revisited

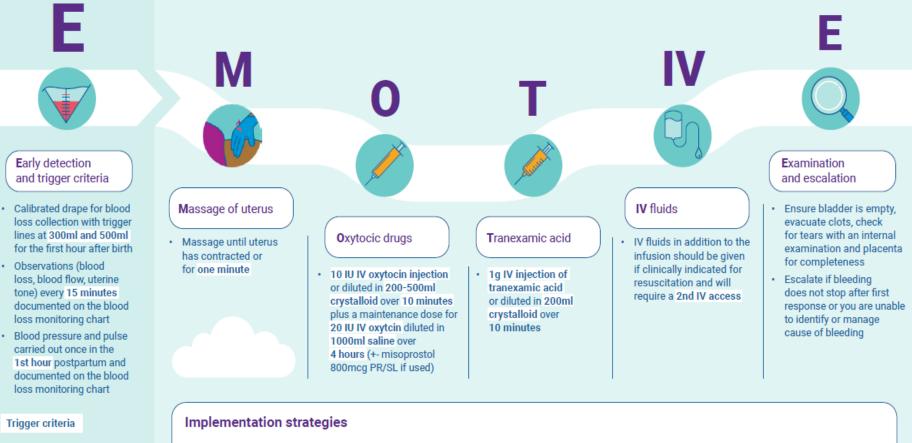
2. PHC/Adult Hospital Level ERC review updated data

# The E-MOTIVE (WHO) trial published in May 2023 provides the updated evidence for the use of TXA, IV which can be extrapolated to PHC level.





## **TREAT**) POSTPARTUM HAEMORRHAGE EARLY



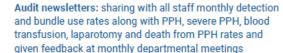
- 1 Clinical judgement
- 2 Blood loss 500ml or more

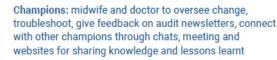
DETECT

AND

3 Blood loss 300ml or more plus one abnormal observation







Trolley and/or carry case: including all medicines and devices required for the treatment of PPH restocked after every use and complete a stocking checklist at the start of every shift



Training: on-site, simulation-based, and peer-assisted training of 90 minutes to a whole day facilitated by the use of provider guides, flipcharts and job aids displayed in labour wards

# **E-MOTIVE Trial Summary**



The E-MOTIVE (WHO) trial published in May 2023 provides the updated evidence for the use of TXA, IV which can be extrapolated to PHC level.

E-MOTIVE trial has shown that a bundle of care that includes TXA given by midwives at district hospital level reduces postpartum haemorrhage (PPH) by 60%.

The E-MOTIVE trial was the Early detection of Postpartum Haemorrhage and treatment using the WHO MOTIVE 'first response' bundle: a parallel cluster-randomized trial that included a baseline control phase, along with mixedmethods evaluation in 210 132 low risk women undergoing vaginal delivery. Results of the study can be extrapolated to community health center/midwifery obstetrics unit level, as all the interventions in the trial were given by midwives without intervention from a doctor. All women with a significant bleed will be urgently transferred to the next level of care, so further management will be under doctor or specialist care.



Department: Health **REPUBLIC OF SOUTH AFRICA**  Reference: Gallos I, Devall A, Martin J, Middleton L, Beeson L, Galadanci H, et al. Randomized Trial of Early Detection and Treatment of Postpartum Hemorrhage. New England Journal of Medicine. 2023 May 9;0(0).

NOTIVE

First response to PPH



Use of Tranexamic Acid IV for the management of PPH at PHC level

**NEMLC** Recommendation



**NEMLC supports** the use of tranexamic acid (TXA) 1g IV (by slow injection or infusion in 200mls of N Saline over 10 minutes) for PPH for all levels of care, which may be initiated by a nurse, but only with prior approval of a medical practitioner.





# Use of Tranexamic Acid IV for the management of PPH at PHC level



# **Changes to the STG**

## **MEDICINE TREATMENT**

### **Replace fluids:**

Sodium chloride 0.9%, IV, infused as fast as possible in one IV line.

### AND

Oxytocin, IV 20 units in 1 000 mL sodium chloride 0.9% infused at 250 mL/hour in 2nd IV line.

### AND

Tranexamic acid, IV, 1g in 200 mL sodium chloride 0.9% over 10 minutes, or 1g by slow IV injection, which may be initiated by a nurse, but only with prior approval of a medical practitioner





### Aspirin for reducing onset of Preeclampsia in high risk patients at PHC level



## Background

Historically, NEMLC retained Aspirin for secondary level initiation in all women with chronic hypertension, who are pregnant as the patient would require referral to the secondary level of care for evaluation and management. NEMLC highlighted that pregnant women with chronic hypertension may have been on complex and teratogenic antihypertensive medication and ultrasound scanning to evaluate the foetus for abnormalities, and/or switching to safer medication would be appropriate for secondary level.



However, patients with historical risk factors (e.g. previous history of preeclampsia) might not be referred immediately to secondary care, but only at a scheduled appointment, which may be a few weeks later. These patients will then potentially miss out on the benefit of early initiation of aspirin prophylaxis.

Therefore, initiation of prophylactic aspirin for pre-eclampsia would also only be appropriate for secondary level of care.

2





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# **Use of Aspirin at PHC level**



## Evidence

Level of Evidence: Systematic Reviews, Randomised Control Trials & Guidelines

	SAFETY	Low-dose aspirin has been widely regarded as safe in pregnancy, although there are small increases in bleeding risk; mostly intrapartum and postpartum bleeding and a small (0.06%) increase in neonatal intracranial bleeds. Most of these risks can be mitigated by discontinuing aspirin by 36 weeks, based on the lack of effectiveness for prevention of term pre-eclampsia.
	AVAILABILITY	Aspirin is widely available, inexpensive and has a favourable fetal and maternal safety profile and research shows that aspirin prophylaxis for women at risk of hypertensive related diseases of pregnancy particularly in low- and middle-income countries results in reduction in the risk of early onset preeclampsia
	GUIDELINE ALIGNMENT	In line with local National Maternity Care Guideline and the International Society for the Study of Hypertension in Pregnancy the aspirin dosing is recommended at bedtime to prevent gastric irritation and initiated from 6 weeks of gestation (but preferably before 16 weeks) until 36 weeks.
REC	COMMENDATION	Aspirin, 150mg, oral for reduction in the risk of early onset pre-eclampsia in pregnancy at PHC level for nurse initiation, in alignment with NDOH maternity and hypertension in pregnancy guidelines.
	health Department: Health REPUBLIC OF SOUTH AFRICA	References:         1. Ngene NC, Moodley J. Preventing maternal morbidity and mortality from preeclampsia and eclampsia         particularly in low- and middle-income countries. Best Pract Res Clin Obstet Gynaecol. 2024 Feb         15;94:102473. doi: 10.1016/j.bpobgyn.2024.102473. Epub ahead of print. PMID: 38513504.         2. NDOH. National Maternity Care Guidelines. Updated 2024.         3. Magee LA, Brown MA, Hall DR, Gupte S, Hennessy A, Karumanchi SA, Kenny LC, McCarthy F, Myers J,         Poon LC, Rana S, Saito S, Staff AC, Tsigas E, von Dadelszen P. The 2021 International Society for the         Study of Hypertension in Pregnancy classification, diagnosis & management recommendations for         international practice. Pregnancy Hypertens. 2022 Mar;27:148-169. doi: 10.1016/j.preghy.2021.09.008. Epub         2021 Oct 9. PMID: 35066406.

# **Use of Aspirin at PHC level**

**NEMLC** Recommendation



**NEMLC supports** the use of aspirin 150mg oral, until 36 weeks of pregnancy, for prevention of pre-eclampsia for all levels of care.







# **Use of Aspirin at PHC level**



# Changes to the STG

From confirmation of pregnancy (all women with risk factors. including: preeclampsia in a previous pregnancy, chronic hypertension, diabetes, antiphospholipid syndrome, or systemic lupus erythematosus (SLE)):

- Aspirin, oral, 150 mg, taken at bedtime, preferably not on an empty stomach, until 36 weeks
  - $\circ~$  Start at 6 weeks of gestation but preferably before 16 weeks
  - $\circ~$  Stop at 36 weeks to reduce risk of bleeding during labour
  - Administration at bedtime reduces the risk of gastric irritation
- Refer to the next level of care as appropriate for the condition (see below).
   Women with a prior history of pre-eclampsia, but otherwise well, can be referred for the next available appointment, preferably around 20 weeks.





# Tenofovir Prophylaxis for Hepatitis B positive women, HIV negative pregnant women – AHL



## Background

### The World Health Organisation Guidelines<sup>1,2</sup> have been updated as reflected below:

<sup>1</sup>Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B infection. Geneva: World Health Organization; 2024. Available at: https://www.who.int/publications/i/item/9789240090903, Accessed 11 July 2024).

<sup>2</sup> Prevention of mother-to-child transmission of hepatitis B virus: guidelines on antiviral prophylaxis in pregnancy. Geneva: World Health Organization; 2020. Available at (https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hepatitis/prevention/mother-to-child-transmission-of-hepatitis-b, Accessed 11 July 2024

#### 7.4.2 New recommendation – TDF prophylaxis for all HBsAg-positive pregnant women (where there is no access to HBV DNA testing)

In many settings, HBV DNA or HBeAg testing is not available to enable targeted TDF prophylaxis for pregnant women with high HBV DNA levels at high risk of MTCT. In such settings, universal TDF prophylaxis could be a strategy to reduce the risk of MTCT of HBV infection, alongside HepB3 and birth-dose immunization. However, no study has compared directly the effectiveness among hBcAg positive pregnant women of universal TDF prophylaxis versus no or targeted prophylaxis. In addition, low- and middle-income countries with high prevalence of HBsAg positivity among pregnant women often overlap with those with low or no uptake of hepatitis B birth-dose vaccination.

The Guidelines Development Group recognized the lack of direct empirical evidence to directly support the effectiveness, cost-effectiveness and feasibility of a universal prophylaxis approach. In settings without access to HBV DNA assays, a conditional recommendation to expand TDF prophylaxis to all HBsAg-positive pregnant women was therefore based on an overall pragmatic approach. This includes addressing the challenge of ongoing MTCT in settings without access to HBV DNA assays, the overall significant balance towards benefits versus harms of this approach, as well as low-certainty evidence based on data from costeffectiveness modelling. This modelling analysis across 110 countries representing all WHO regions suggested that prophylaxis for all HBsAg-positive pregnant women would have great impact on PMTCT of HBV, with about 4.9 million (95% CI: 4.7 million–5.1 million) neonatal infections averted. The relative cost-effectiveness of the universal and HBV DNA-driven strategies (each compared with a sole hepatitis B birth-doce strategy) was highly dependent on the relative costs of treatment and diagnostic tests (*18*).

More recent data based on timing of antiviral prophylaxis from the previous systematic review (11) showed that antiviral therapy at least four weeks before delivery reduces HBV DNA levels at delivery (19) and may reduce the risk of MTCT among babies who do not receive a timely hepatitis B birth dose, hepatitis B immunization, a common concern in endemic countries.

Other key considerations include the following.

 HBV perinatal transmission continues to be the dominant mode of ongoing HBV transmission worldwide (21), and especially in sub-Saharan Africa, which continues to have low uptake of hepatitis B birth-dose vaccination. Data also indicate a significant residual risk (>10%) of HBV MTCT among highly viraemic (>200 000 IU/mL) pregnant women despite receiving a timely hepatitis B birth dose (10,22).





# Tenofovir Prophylaxis for Hepatitis B positive women, HIV negative pregnant women - AHL



## Recommendation

Tenofovir monotherapy for the prevention of vertical transmission of Hepatitis B in HIV Negative pregnant women with chronic active Hepatitis B infection who are HBeAG positive.

Maternal TDF prophylaxis be pragmatically offered to all HBsAg positive pregnant woman even if the HBeAg or viral load result is unavailable

Consider Tenofovir Alafenamide (TAF) for people (including pregnant women) with impaired kidney function (eGFR 15-50mL/min) and/or osteoporosis noting that TAF is not recommended if eGFR is <15 ml/min)





# **Referral for Tenofovir Alafenamide (TAF)**



## **Considerations in renal impairment**

Women with known renal disease should be referred to a specialist to evaluate for the presence and severity of renal impairment, proteinuria and/or hypertension.

Women with hypertension and proteinuria prior to 20 weeks gestation should be referred for tertiary care for further work-up.

MATERNITY CARE GUIDELINES

Pregnancy is contra-indicated in women with stage 4-5 chronic kidney disease. (Glomerular filtration rate < 30 mL/minute and serum creatinine > 250 umol/L)



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# Tenofovir Prophylaxis for Hepatitis B positive women, HIV negative pregnant women - AHL



# **Changes to the STG**

#### Prevention of perinatal transmission

- » Caesarean delivery is reserved for obstetric indications only.
- » Delivery should take place in a facility that can offer Hepatitis B vaccination to the baby at birth.
- » Administration of ARVs active against HBV from 28 weeks of pregnancy will further reduce risk of vertical transmission.

#### Pregnant women who are HBsAg/ HBeAg positive and HIV negative

- All HIV negative pregnant women are eligible for HIV Pre-exposure prophylaxis (PrEP) (see PHC STGs and EML, section 11.11: Pre-exposure prophylaxis (PrEP)). TDF, which is included in the oral PrEP regimen, has anti-HBV activity, and will reduce the risk of vertical transmission of HBV.
- » Women who are HIV negative and HBsAg positive who decline PrEP must be counselled that TDF will reduce risk of vertical transmission of Hepatitis B to the baby, particularly if HBeAg is positive or HBV viral load is high.
- TDF 300 mg daily should be administered from 28 weeks of pregnancy until birth to women with a high hepatitis viral load (≥200 000 IU/mL), or positive HBeAg, or where HBeAg/viral load result is unavailable at 28 weeks.
- For care of babies born to: (1) mothers with acute hepatitis B infection at the time of delivery, (2) mothers who are HBsAg-positive, or (3) mothers who are HBeAg-positive, see Primary Health Care STGs and EML, section 6.6.5: Hepatitis B exposed infant.
- » Obtain infectious disease specialist or internal medicine physician opinion before stopping TDF as there is a risk for postpartum hepatitis flare.
- » Consider continued treatment for HBV after delivery where indicated (see section 1.2.4.2 Hepatitis B, chronic (non-HIV coinfection)).

#### REFERRAL

- » Cirrhosis.
- » Liver failure.
- » Renal dysfunction (TDF is contraindicated in renal impairment. Tenofovir alafenamide (TAF) should be prescribed in place of TDF).
- » Refer all infected babies to a specialist paediatrician for further management.





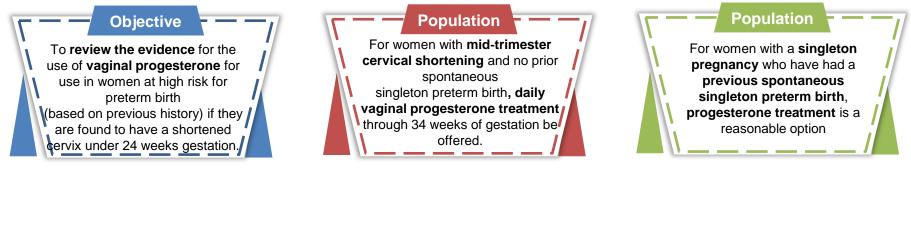
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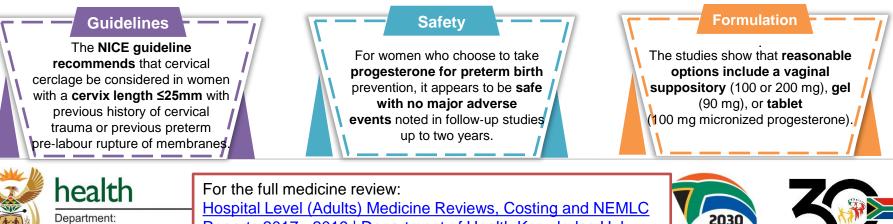




# **Background and Evidence**

A medicine review on progesterone to prevent preterm labour was completed. The key findings of the review are highlighted below:





Reports 2017 - 2019 | Department of Health Knowledge Hub

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# **NEMLC** Recommendation

NEMLC recommended daily vaginal progesterone treatment through to 34 weeks of gestation in:

RECOMMEND

Mid-trimester cervical shortening (defined as ≤25 mm before 24 weeks gestation) with no prior spontaneous singleton preterm birth

Women with a history of spontaneous preterm birth or mid-trimester loss.

NB: In the South African setting, routine cervical screening is not practiced in low-risk women as it is considered to be unpractical and unaffordable - sonography (ultrasound imaging) is not readily available at all facilities.







# **Rationale for Recommendation**

Guidance **aligned with NICE Guideline** recommendations that were informed by systematic review and meta-analysis that included the **OPPTIMUM study** which showed conflicting results of no benefit of vaginal progesterone in preventing preterm labour.

Subgroup analysis and individual participant data meta-analysis of low to moderate quality evidence showed that for women with a history of spontaneous preterm birth, or women with a short cervix (<25mm), vaginal progesterone decreases the number of preterm births (at <34 weeks' gestation) compared to placebo.



Furthermore, pharmacological management with **vaginal progesterone** is **non-invasive and less costly** compared to cerclage.



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Norman JE, Marlow N, Messow CM, Shennan A, Bennett PR, Thornton S, Robson SC, McConnachie A, Petrou S, Sebire NJ, Lavender T, Whyte S, Norrie J; OPPTIMUM study group. Vaginal progesterone prophylaxis for preterm birth (the OPPTIMUM study): a multicentre, randomised, double-blind trial. Lancet. 2016 May 21;387(10033):2106-2116. doi: 10.1016/S0140-6736(16)00350-0. Epub 2016 Feb 24. Erratum in: Lancet. 2019 Jan 19;393(10168):228. doi: 10.1016/S0140-6736(18)32625-4. Erratum in: Lancet. 2019 Apr 20;393(10181):1596. doi: 10.1016/S0140-6736(19)30860-8. PMID: 26921136; PMCID: PMC5406617.





### **New STGs Added**

#### **Medicine treatment**

Women should be counselled that 20 cerclage procedures will prevent one preterm delivery (NNT 17 to 20) and that progesterone is successful in

1 out of every 8 cases (NNT 6 to 8), to assist them in making an informed decision.

Consider prophylactic vaginal progesterone or cervical cerclage (MacDonald suture) for women with:

- » history of spontaneous preterm birth (27-34 weeks) or midtrimester loss (16-24 weeks), and/or
- » cervical length  $\leq$  25 mm confirmed on ultrasound (16-24 weeks).
- Progesterone, PV, 200 mg daily.
- Stop treatment at 34 weeks and refer to antenatal services at primary level of care for further management.

(Note: Vaginal progesterone may be considered in high-risk women with a normal cervix length confirmed on ultrasound).

Consider prophylactic cervical cerclage (MacDonald suture) only for women with:

» cervical length ≤ 25 mm confirmed on ultrasound (16-24 weeks),

#### AND

- » history of preterm prelabour rupture of membranes (PPROM), or
- » history of cervical trauma.

#### Rescue cerclage:

- » If the cervix is already open and the membranes exposed, but unruptured, consider a rescue cervical cerclage (16-27 weeks).
- » Do not insert a rescue cerclage if there are contractions, active vaginal bleeding or signs of infection.

Cerclage should be removed at 36 weeks, and thereafter the patient can be referred to antenatal services at primary level of care.

#### Referral

Women with recurrent losses and previous cerclage that torn out (severe cervical trauma), as they may require an abdominal cerclage.





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# Levonorgestrel Intra-uterine Device (LNG-IUD) for PHC use (PHC CH 7:Family Planning)



### What is Mirena?

A small T-shaped hormone releasing device that is inserted (by healthcare professional) into the uterus to prevent pregnancy

### How does it Work?

Levonorgesterol, released by the device thickens the cervical mucus to prevent sperm from reaching or fertilizing the egg



#### <u>Pros:</u> Highly Effective Does not require daily/monthly monitoring

Cons: High Cost

### Previous NEMLC Standing on Mirena

On 27 April 2015, NEMLC had recommended that standard-dose LNG-IUD, 52mg not be recommended for contraception, as despite comparable effectiveness and safety with copper IUD, standard-dose LNG-IUD, 52mg is not affordable for contraception

Following a health economic analysis, on 27 September 2018 NEMLC recommended standard-dose LNG-IUD, 52mg for refractory abnormal uterine bleeding as third-line treatment option at Tertiary and Quaternary Level of Care

More recently, on 17 September 2020 NEMLC recommended that the low-dose LNG-IUD, 19.5mg not be included on the PHC EML, as it is expensive relative to other contraceptive agents currently included on the EML





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Levonorgestrel Intra-uterine Device (LNG-IUD) for PHC use (PHC CH 7:Family Planning)



## **Considerations for inclusion**

Consideration	Rationale
Supply Challenges	With contraceptive supply challenges, new agent would be considered
Choice	Patients concerned have a right to choose whether to use contraceptives and also which method to use.
Uptake of contraceptives	Uptake of contraceptives has not increased substantially since 2013. Increasing the contraception options would provide a broader base to choose from.
Advantages over Copper IUCD	Different mechanism of action Decreases menstrual blood after 3 months of use with amenorrhea in about 20% of women Decreases menstrual pain and the risk of pelvic infection and endometrial cancer
Cost	Administering LNG-IUD 52mg instead of a Copper IUCD (most relevant comparator) will result in a R560.78 increase in cost per patient over a five-year time horizon.
Drug Interactions	LNG-IUD is an acceptable option for women living with HIV, as apart from the contraceptive benefits, there is a decreased risk for HIV transmission LNG-IUD is not a contra-indication in patients with veno-thromboembolism on chronic anticoagulants from the STG.



National Department of Health: Affordable Medicines, EDP- Primary Healthcare level. Medicine Review: Levonorgestrel-releasing intrauterine system for
 contraception, April 2013. <u>https://www.knowledgehub.org.za/e-library</u>
 National Department of Health: Affordable Medicines, EDP- Primary Healthcare level. Medicine Review: Low-dose levonorgestrel-releasing intrauterine system for contraception, August 2020. <u>https://www.knowledgehub.org.za/e-library</u>



Levonorgestrel Intra-uterine Device (LNG-IUD) for PHC use (PHC CH 7:Family Planning)

# **NEMLC Recommendation**



**NEMLC** recommended that **LNG-IUD 52 mg** be included in the PHC STG and EML at the reduced proposed price of R720.36 as a contraceptive option.

Low-dose LNG IUD 19 mg was recommended for inclusion to the therapeutic interchange database as an alternative option of a progestincontaining IUD.

NEMLC also recommended the monitoring of discontinuation rates (by Provinces) and implementation with adequate training (by the NDoH Programme).





# Levonorgestrel Intra-uterine Device (LNG-IUD) for PHC use (PHC CH 7:Family Planning)



## **Addition to the STGs**

#### 7.2.2 Levonorgestrel intra-uterine system (LNG-IUD)

#### Z30.0/Z30.4/Z30.8

Dual protection with barrier methods is recommended to reduce the risk of STIs including HIV.

The LNG-IUD is an effective, safe, reversible long-term contraceptive method requiring no patient effort to adhere to the method, has minimal hormonal adverse effects and is not prone to drug interactions.

- Progestin-only intrauterine device, e.g.:
- Levonorgestrel, intrauterine device, 52 mg.

#### HIV infection is NOT a contra-indication to the use of an LNG-IUD.

The LNG-IUD is a T-shaped plastic device that steadily releases a small amount of levonorgestrel every day. It has the added benefit of reducing menstrual cramping and heavy menstrual bleeding. It can be inserted by specially trained heath care professionals, any time during the menstrual cycle once pregnancy has been excluded (by clinical history or with a pregnancy test if required). Insertion at menstruation may be easier for the patient resulting in less discomfort and spotting. For use by women of any age, regardless if they had children before.

LNG-IUD may be inserted immediately postpartum or post miscarriage (within 48 hours) providing that no contra-indications are present (chorioamnionitis, ruptured membranes for more than 18 hours or postpartum haemorrhage). A provider requires specific training in postpartum insertion by hand or using a ring forceps.

Counsel women to return if they experience complications (excessive bleeding, excessive pain, fever or foul smelling discharge).

LNG-IUD may also be inserted at 4 or more weeks postpartum.

Advise the patient when to return:

- Expulsion of LNG-IUD or if strings of the LNG-IUD protrude.
- Complications (see below).
- Routine follow-up after 3–6 weeks.

LNG-IUD is not recommended for women with acute venous thromboembolism, severe liver cirrhosis, active pelvic inflammatory disease (PID), purulent cervicitis, unexplained uterine bleeding, cervicalbreast- ovarian- or endometrial cancers or other uterine abnormalities.

#### For mild pain and discomfort after insertion:

Ibuprofen, oral, 400 mg 8 hourly with or after a meal as needed for up to 3 days.

#### REFERRAL

- Excessive pain or bleeding after insertion.
- Signs of infection within 7 days of insertion (e.g. fever, abdominal pain and/or foul-smelling discharge).

#### Abnormal bleeding for > 3 months.



# Thank you



