NHS

National Institute for Health and Clinical Excellence

Quick reference guide

Issue date: October 2005

Long-acting reversible contraception

NICE Clinical Guideline 30
Developed by the National Collaborating Centre for Women's and Children's Health

Contents

About this information

Woman-centred care

Treatment and care should take into account women's individual needs and preferences. Good communication is essential, supported by evidence-based information, to allow women to reach informed decisions about their care. If a woman does not have the capacity to make decisions, healthcare professionals should follow the Department of Health guidelines, *Reference guide to consent for examination or treatment* (2001) (available from www.dh.gov.uk).

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This guidance is written in the following context

This guidance represents the view of the Institute, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgment. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Key priorities for implementation

The following recommendations have been identified as priorities for implementation.

Contraceptive provision

- Women requiring contraception should be given information about and offered a choice of all methods, including long-acting reversible contraception (LARC) methods.
- Contraceptive service providers should be aware that:
  - all currently available LARC methods (intrauterine devices [IUDs], the intrauterine system [IUS], injectable contraceptives and implants) are more cost effective than the combined oral contraceptive pill even at 1 year of use
  - IUDs, the IUS and implants are more cost effective than the injectable contraceptives
  - increasing the uptake of LARC methods will reduce the numbers of unintended pregnancies.

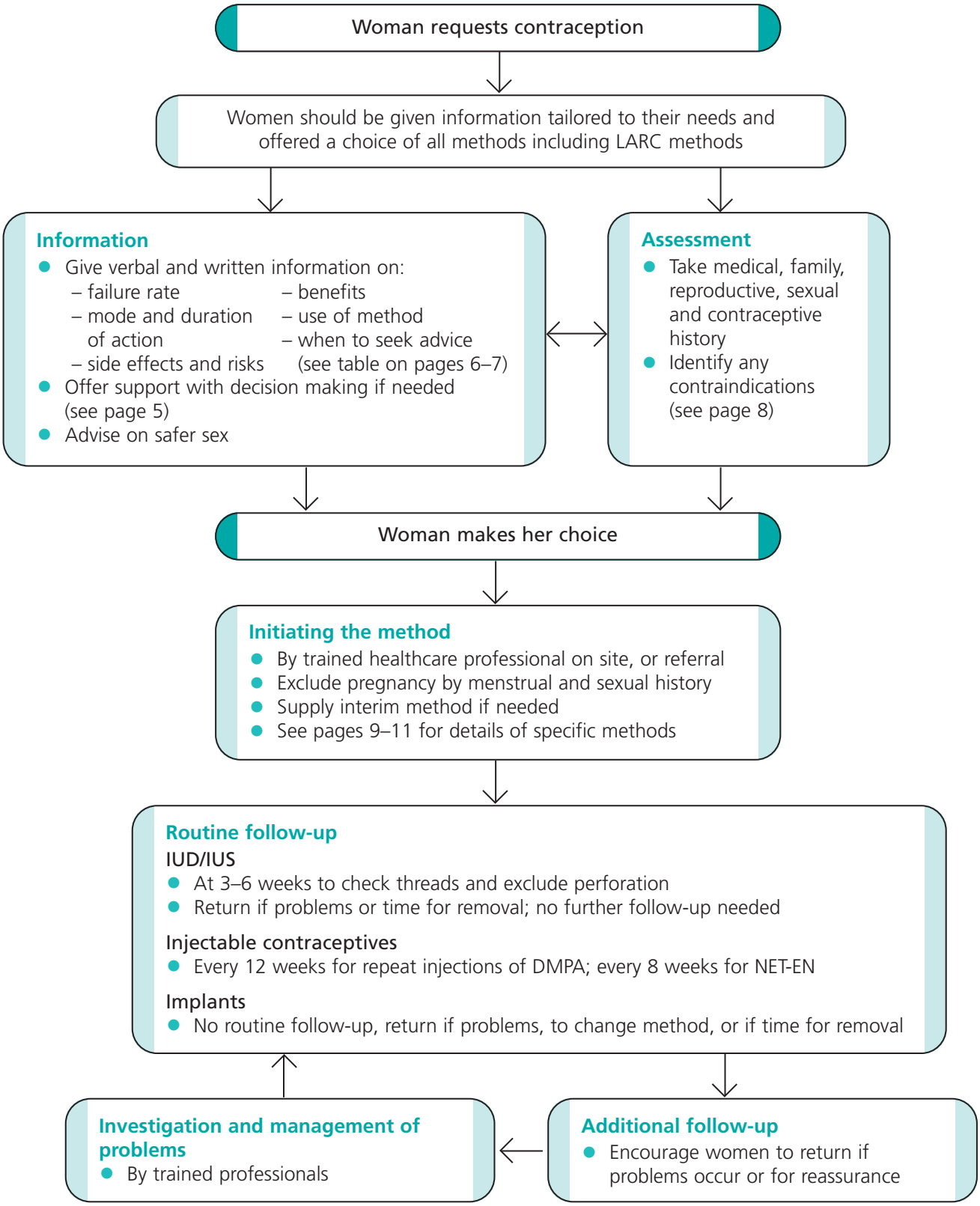
Counselling and provision of information

- Women considering LARC methods should receive detailed information – both verbal and written – that will enable them to choose a method and use it effectively. This information should take into consideration their individual needs and should include:
  - contraceptive efficacy
  - duration of use
  - risks and possible side effects
  - non-contraceptive benefits
  - the procedure for initiation and removal/discontinuation
  - when to seek help while using the method.

Training of healthcare professionals in contraceptive care

- Healthcare professionals advising women about contraceptive choices should be competent to:
  - help women to consider and compare the risks and benefits of all methods relevant to their individual needs
  - manage common side effects and problems.
- Contraceptive service providers who do not provide LARC within their own practice or service should have an agreed mechanism in place for referring women for LARC.
- Healthcare professionals providing intrauterine or subdermal contraceptives should receive training to develop and maintain the relevant skills to provide these methods.

The care pathway



Cost effectiveness

- LARC methods are more cost effective than the combined oral contraceptive pill even at 1 year of use.
- IUDs, the IUS and the implant are more cost effective than injectable contraceptives.
- Increasing the use of LARC will reduce unwanted pregnancies.

Informed consent for special groups

- Information should take into account the woman's needs.
- If needed, offer support with decision making such as:
  - an interpreter for women who do not speak English
  - an advocate for women with sensory impairments or learning disabilities.
- Be aware of the law on providing contraceptives for young people and people with learning disabilities.
- Follow the Fraser guidelines[1] when providing contraception for women younger than 16 years.
- Look at contraceptive choices in terms of the needs of the woman, rather than relieving anxieties of carers or relatives.
- If a woman is unable to understand and take responsibility for decisions about contraception, carers and others should meet to agree a care plan.

Consent for unlicensed use

- When using a LARC method outside its UK Marketing Authorisation, always discuss this, obtain informed consent, and document this in the notes.

Training and referral

- All healthcare professionals providing LARC methods need training in the relevant skills.
- Staff should fit IUDs and the IUS only if they are trained, and if they fit at least one IUD or IUS a month.
- Practices and services that do not offer LARC methods should have an agreed mechanism for referring women.
- If a woman being treated for a current venous thromboembolism needs hormonal contraception, refer her to a specialist in contraceptive care.

[1] See the Department of Health's *Best practice guidance for doctors and other healthcare professionals on the provision of advice and treatment to young people under 16 on contraception, sexual and reproductive health* (July 2004). Available from www.dh.gov.uk

Features of LARC methods to discuss with women

	Copper IUDs	IUS	Progestogen-only injections	Implants (Implanon)
How it works	• By preventing fertilisation and inhibiting implantation	• Mainly by preventing implantation; sometimes by preventing fertilisation	• Primarily by preventing ovulation	• By preventing ovulation
Duration of use	• 5–10 years for IUDs with 380 mm^2 copper, depending on type • Until contraception no longer needed if woman 40 years or more at time of insertion[a]	• 5 years • Until contraception no longer needed if woman 45 years or more at time of insertion and does not have periods with IUS in place[a]	• Repeat injections needed every 12 weeks (DPMA) or 8 weeks (NET-EN)[b]	• 3 years
Failure rate	• Fewer than 2 in 100 women over 5 years, for IUDs with at least 380 mm^2 copper • Expulsion occurs in fewer than 1 in 20 women in 5 years	• Fewer than 1 in 100 women over 5 years • Expulsion occurs in fewer than 1 in 20 women in 5 years	• Fewer than 0.4 in 100 over 2 years; pregnancy rates lower for DPMA than NET-EN	• Fewer than 0.1 in 100 over 3 years
Risks	• Up to 50% of women stop using IUDs within 5 years; most common reasons are unacceptable vaginal bleeding and pain • Ectopic pregnancy: overall rates lower than with no contraception. But if a woman becomes pregnant with IUD in situ, risk is about 1 in 20 so she should seek advice to exclude it • Pelvic inflammatory disease: less than 1% for women at low risk of sexually transmitted infection (STI) • Uterine perforation: less than 1 in 1000 • Change in mood or libido: may be a small effect, similar for IUD and IUS **No evidence of effect on** • Weight gain	• Up to 60% of women stop using the IUS within 5 years; most common reasons are unacceptable vaginal bleeding and pain, less common reason is hormonal (non-bleeding) problems • Ectopic pregnancy: overall rates lower than with no contraception. But if a woman becomes pregnant with IUS in situ, risk is about 1 in 20 so she should seek advice to exclude it • Pelvic inflammatory disease: less than 1% for women at low risk of STI • Uterine perforation: less than 1 in 1000 • Change in mood or libido: may be a small effect, similar for IUD and IUS • Acne: risk may be increased, but is an uncommon reason for stopping use **No evidence of effect on** • Weight gain	• Up to 50% of women stop using DMPA by 1 year; the most common reason is an altered bleeding pattern such as persistent bleeding • Weight gain: may be up to 2–3 kg over a year on DMPA • Bone mineral density: DMPA use is associated with small loss; largely recovered when DMPA is stopped No evidence that fracture risk is increased **No evidence of effect of DMPA on** • Depression • Acne • Headaches	• Up to 43% of women stop using Implanon within 3 years; 33% because of irregular bleeding, and less than 10% for other reasons including hormonal (non-bleeding) problems • Acne: may occur **No evidence of effect on** • Weight • Mood • Libido • Headaches • Bone mineral density

continued

Features of LARC methods to discuss with women *continued*

	Copper IUDs	IUS	Progestogen-only injections	Implants (Implanon)
Effects on periods	• Heavier bleeding and/or dysmenorrhoea likely	• Irregular bleeding and spotting common in first 6 months • Oligomenorrhoea or amenorrhoea likely by end of first year	• Amenorrhoea is common, and is more likely with DMPA than NET-EN, and with longer use; not harmful • Persistent bleeding may occur	• Changes in bleeding patterns are likely; 20% of women have no periods, and almost 50% have infrequent, frequent or prolonged bleeding; bleeding patterns are likely to remain irregular • Dysmenorrhoea may improve
Return to fertility	• No evidence of delay	• No evidence of delay	• Can take up to a year • But women who do not want to get pregnant should start a different contraceptive as soon as they stop injections	• No evidence of delay
Advice at time of fitting	• There may be pain and discomfort for a few hours and light bleeding for a few days • Watch for symptoms of uterine perforation • Follow-up visit after first menses or 3–6 weeks after insertion • Return at any time if problems or to change method • Check for threads regularly	• There may be pain and discomfort for a few hours and light bleeding for a few days • Watch for symptoms of uterine perforation • Follow-up visit after first menses or 3–6 weeks after insertion • Return at any time if problems or to change method • Check for threads regularly	• Return for next injection, or if problems	• Insertion and removal cause discomfort and bruising but technical problems occur in fewer than 1 in 100 procedures • If an implant cannot be palpated it should be localised by ultrasound before being removed; deeply inserted implants often need to be removed by an expert • No routine follow-up but return at any time if problems or to change or discontinue the method

[a] Check Summary of Product Characteristics for current licensed indications
[b] At time of publication, NET-EN is licensed for short-term use (two injections)

See note on page 5 about using methods outside their Marketing Authorisation

Choice of method for different groups of women

All LARC methods are suitable for:

- nulliparous women
- women who are breastfeeding
- women who have had an abortion – at time of abortion or later
- women with BMI > 30
- women with HIV – encourage safer sex
- women with diabetes
- women with migraine with or without aura – all progestogen-only methods may be used
- women with contraindication to oestrogen

Choices for adolescents

- **IUD, IUS, implants**: no specific restrictions to use
- **DMPA**: care needed; use only if other methods unacceptable or not suitable[2]

Choices for women more than 40 years old

- **IUD, IUS, implants**: no specific restrictions to use
- **DMPA**: care needed, but generally benefits outweigh risks[2]

Choices for women post-partum, including breastfeeding

- **IUD, IUS**: can be inserted from 4 weeks after childbirth (see page 9)
- **DMPA, implants**: any time after childbirth

Choices for women taking other medication

- **IUS, DMPA**: no evidence that effectiveness of other medication reduced
- **Implants**: not recommended for women taking enzyme-inducing drugs

Choices for women with epilepsy

- **IUD, IUS, DMPA**: no specific contraindications; DMPA use may be associated with reduced seizure frequency
- **Implants**: not recommended for women taking enzyme-inducing drugs

Choices for women at risk of sexually transmitted infection (STI)

- **IUD, IUS**: tests may be needed before insertion
- **DMPA, implants**: no specific contraindications
- Provide advice on safer sex

[2] Refer to CSM advice issued in November 2004. Go to www.mhra.gov.uk and search for 'Depo Provera'.

Practical details of LARC methods

Copper intrauterine devices and the intrauterine system

Use in women over 40

- **IUDs**: Women aged 40 years or older when their IUD is inserted can keep it until they no longer need contraception, even if this is beyond the duration of the UK Marketing Authorisation[3].
- **IUS**: Women who are aged 45 years or older when their IUS is inserted and are amenorrhoeic may keep it until they no longer need contraception, even if this is beyond the duration of UK Marketing Authorisation[3].

Assessing and managing STIs and other infections

- Before inserting an IUD or IUS, test for:
  - *Chlamydia trachomatis* in women at risk of STIs
  - *Neisseria gonorrhoeae* in women at risk of STIs in areas where it is prevalent
  - any STIs in women who request it.
- For woman at increased risk of STIs, give prophylactic antibiotics before inserting an IUD or IUS if testing has not been completed.
- For women with identified risks associated with uterine or systemic infection, arrange investigations, and give appropriate prophylaxis or treatment before inserting an IUD or IUS.

When fitting

- The risk of uterine perforation is related to the skill of the healthcare professional inserting the IUD or IUS.
- **IUDs only**: When choosing an IUD, consider the licensed duration of use, and the fact that the most effective IUDs contain at least 380 mm^2 of copper and have banded copper on the arms.
- Provided it is reasonably certain that the woman is not pregnant, an IUD or IUS may be inserted:
  - at any time during the menstrual cycle (but, for the IUS, if the woman is amenorrhoeic or it is more than 5 days since her period started, she should use barrier contraception for the first 7 days after insertion)
  - immediately after first or second trimester abortion (or at any time afterwards)
  - from 4 weeks post-partum, irrespective of the mode of delivery[4].
- If the woman has epilepsy, have emergency drugs including anti-epileptic medication available because seizure risk may be increased at the time of fitting an IUD or IUS.
- Women with a history of venous thromboembolism (VTE) may use the IUS.
- Give the woman information about follow-up and when to seek help about problems (see table on pages 6–7).

[3] If using outside licensed indications, discuss, obtain informed consent and document this in the notes.
[4] At the time of publication, use before 6 weeks post-partum is outside the UK Marketing Authorisation for the IUS. Check Summary of Product Characteristics for current licensed indications; if using outside licensed indications, discuss, obtain informed consent and document this in the notes.

Follow-up and managing problems

- At first follow-up visit (after the first menses, or 3–6 weeks after insertion), exclude infection, perforation or expulsion.
- **IUD only**: For heavier and/or prolonged bleeding associated with use of an IUD:
  - treat with non-steroidal anti-inflammatory drugs and tranexamic acid
  - or suggest changing to the IUS if the woman finds bleeding unacceptable.
- If *Actinomyces*-like organisms are seen on a cervical smear, assess for pelvic infection, and remove the IUD or IUS if there are signs of infection.
- If a woman becomes pregnant with an intrauterine pregnancy, advise removal of the IUD or IUS before 12 weeks' gestation, whether or not she intends to continue the pregnancy.

Injectable contraceptives

When administering

- Give by deep intramuscular injection into the gluteal or deltoid muscle or the lateral thigh.
- Provided it is reasonably certain that the woman is not pregnant, use may be started:
  - up to and including the fifth day of the menstrual cycle without the need for additional contraceptives
  - at any other time in the cycle, but barrier contraception should be used for the first 7 days after injection
  - immediately after first or second trimester abortion, or at any time afterwards
  - at any time post-partum.

Follow-up and managing problems

- Repeat injections of DMPA may be given up to 2 weeks late without the need for additional contraceptives[5].
- Treat persistent bleeding associated with DMPA use with mefenamic acid or ethinylestradiol.
- When considering DMPA use beyond 2 years, review the woman's clinical situation, discuss the balance of benefits and risks, and support her choice[6].
- There is no evidence of congenital malformation to the fetus if pregnancy occurs during DMPA use.

[5] At the time of publication, this use is outside the UK Marketing Authorisation. Check Summary of Product Characteristics for current licensed indications; if using outside licensed indications, discuss, obtain informed consent and document this is the notes.
[6] Refer to CSM advice issued in November 2004. Go to www.mhra.gov.uk and search for 'Depo Provera'

Implants

When fitting

- Provided it is reasonably certain that the woman is not pregnant, Implanon may be inserted:
  - at any time (but use barrier methods for first 7 days if the woman is amenorrhoeic or it is more than 5 days since menstrual bleeding started)
  - immediately after abortion in any trimester
  - at any time post-partum.
- Give the woman information about what to expect, and when to seek help about problems (see table on pages 6–7).

Follow-up and managing problems

- No routine follow-up is needed but the woman should be strongly encouraged to return to discuss problems, if she wants to change her method of contraception, or if it is time to have the implant removed.
- Treat irregular bleeding with mefenamic acid or ethinylestradiol[7].
- Remove the implant if a woman becomes pregnant and continues with the pregnancy, although there is no evidence of a teratogenic effect.

Further information

Quick reference guide

This quick reference guide to the NICE guideline on long-acting reversible contraception contains the key priorities for implementation, summaries of the guidance, and notes on implementation. It has been distributed to healthcare professionals in England (see www.nice.org.uk/CG030distributionlist).

It is also available from www.nice.org.uk/CG030quickrefguide

For printed copies, phone the NHS Response Line on 0870 1555 455 and quote reference number N0915.

NICE guideline

The NICE guideline, 'Long-acting reversible contraception', is available from www.nice.org.uk/CG030NICEguideline

It contains these sections: Key priorities for implementation; 1 Guidance; 2 Notes on the scope of the guidance; 3 Implementation in the NHS; 4 Research recommendations; 5 Other versions of this guideline; 6 Related NICE guidance; 7 Review date. It also gives details of the grading scheme for the recommendations, the Guideline Development Group and the Guideline Review Panel and criteria for audit.

[7] The recommendation on treating irregular bleeding after insertion of a contraceptive implant has been changed (this is recommendation 1.5.4.2 in the NICE guideline). Although the evidence does show that mifepristone is effective at controlling irregular bleeding associated with implants, it is not licensed for this indication. The revised recommendation reads: 'Irregular bleeding associated with implant use can be treated with mefenamic acid or ethinylestradiol.'

Further information

Full guideline

The full guideline includes the evidence on which the recommendations are based, in addition to the information in the NICE guideline. It is published by the National Collaborating Centre for Women's and Children's Health. It is available from www.ncc-wch.org.uk/index.asp?PageID=21, the website of the National Library for Health (www.nlh.nhs.uk), and from www.nice.org.uk/CG030fullguideline

Information for the public

NICE has produced a version of this guidance for the public, which is available from www.nice.org.uk/CG030publicinfo

For printed copies, phone the NHS Response Line on 0870 1555 455 and quote reference number N0916.

Implementation tools

This guideline is supported by the following implementation tools available on the NICE website from November 2005:

- a national costing report
- a local costing template
- a slide set.

Related NICE guidance

There is no related guidance.

Review date

The process of reviewing the evidence is expected to begin 4 years after the date of issue of this guideline. Reviewing may begin before this if significant evidence that affects the guideline recommendations is identified. The updated guideline will be available within 2 years of the start of the review process.

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