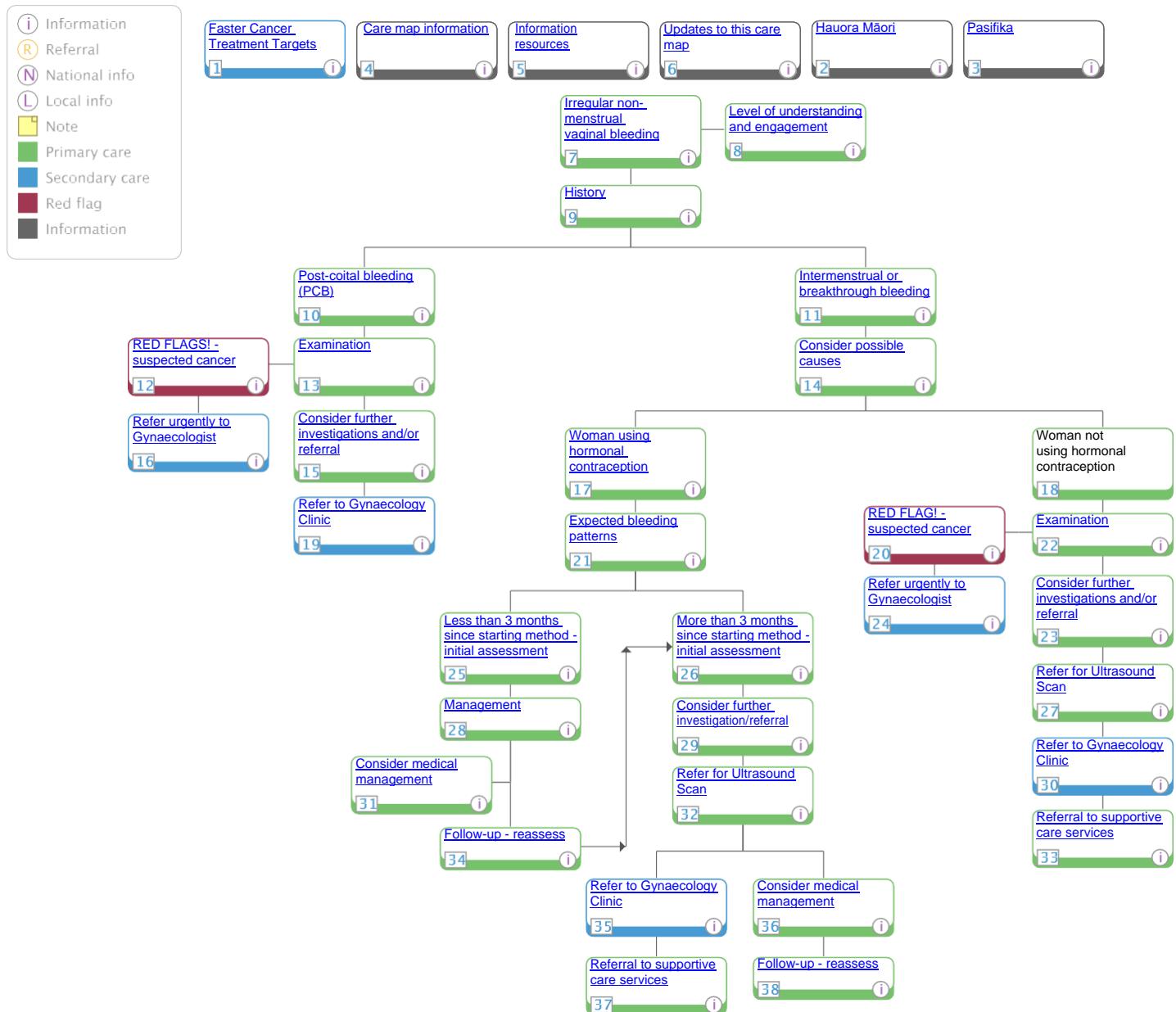


Post-Coital and Intermenstrual Bleeding

Obstetrics and Gynaecology > Gynaecology > Abnormal Vaginal Bleeding



1. Faster Cancer Treatment Targets

Faster Cancer Treatment:

- the Faster Cancer Treatment (FCT) health target builds on the significant improvements that have been made in the quality of cancer services over recent years. It provides a lens across the whole cancer pathway to ensure people have prompt access to excellent cancer services

Targets:

- 85 percent of patients receive their first cancer treatment (or other management) within 62 days of being referred with a high suspicion of cancer and a need to be seen within two weeks by July 2016, increasing to 90 percent by June 2017

Ministry of Health:

- [Ministry of Health High Suspicion of Cancer Definitions](#)
- [National Tumour Standards - Gynaecology](#)

2. Hauora Māori

Māori are a diverse people and whilst there is no single Māori identity, it is vital practitioners offer culturally appropriate care when working with Māori Whānau. It is important for practitioners to have a baseline understanding of the issues surrounding Māori health.

This knowledge can be actualised by (not in any order of priority):

- acknowledging [Te Whare Tapa Whā \(Māori model of health\)](#) when working with Māori Whānau
- asking Māori clients if they would like their Whānau or significant others to be involved in assessment and treatment
- asking Māori clients about any particular cultural beliefs they or their Whānau have that might impact on assessment and treatment of the particular health issue ([Cultural issues](#))
- consider the importance of [whānaungatanga \(making meaningful connections\)](#) with their Māori client / Whānau
- knowledge of [Whānau Ora, Te Ara Whānau Ora and referring to Whānau Ora Navigators](#) where appropriate
- having a historical overview of legislation that has impacted on Māori well-being

For further information:

- [Hauora Māori](#)
- [Central PHO Māori Health website](#)

3. Pasifika

[Pacific Cultural Guidelines \(Central PHO\) 6MB file](#)

Our Pasifika community:

- is a diverse and dynamic population:
 - more than 22 nations represented in New Zealand
 - each with their own unique culture, language, history, and health status
 - share many similarities which we have shared with you here in order to help you work with Pasifika patients more effectively

The main Pacific nations in New Zealand are:

- Samoa, Cook Islands, Fiji, Tonga, Niue, Tokelau and Tuvalu

Acknowledging [The FonoFale Model \(pasifika model of health\)](#) when working with Pasifika peoples and families.

Acknowledging general pacific guidelines when working with Pasifika peoples and families:

- [Cultural protocols and greetings](#)
- [Building relationships with your pasifika patients](#)
- [Involving family support, involving religion, during assessments and in the hospital](#)
- [Home visits](#)
- [Contact information](#)

Pasifika Health Service

The Pasifika Health Service is a service provided free of charge for:

- all Pasifika people living in Manawatu, Horowhenua, Tararua and Otaki who have long term conditions
 - all Pasifika mothers and children aged 0-5 years
- an appointment can be made by the patient, doctor or nurse
- the Pasifika Health Service contact details are:
 - Palmerston North Office - 06 354 9107
 - Horowhenua Office - 06 367 6433
- [more information and referral](#)

Additional resources:

- Ala Mo'ui - [Pathways to Pacific Health and Wellbeing 2014-2018](#)
- Primary care for pacific people: [a pacific health systems approach](#)

4. Care map information

In scope:

- investigation of Post Coital/Intermenstrual Bleeding to diagnose Endometrial Cancer
- adults over age 18 years

Out of scope:

- diagnosis and management of uterine sarcoma

Definition:

- endometrial cancer:
 - most common type is endometrioid adenocarcinoma, which is composed of malignant glandular epithelial elements
 - clear-cell and serous carcinoma of the endometrium are tumours that are histologically similar to those noted in the ovary and the fallopian tube
 - in approximately 75% of patients with endometrial adenocarcinoma, the invasive neoplasm is localised to the uterus at diagnosis (stage I)
 - PMB – defined as the occurrence of vaginal bleeding 12 months or more after a woman's last menstrual cycle

5. Information resources

Information resources for patients and carers:

- [The New Zealand Gynaecological Cancer Foundation](#)
- [Cancer Society \(NZ\)](#)
- [Women's Cancer Center of New Zealand](#)

[• Gynaecology Cancers - Information for all Women](#)

Information resources for clinicians:

- [Cancer Society - Gynaecological Cancer Information](#)
- [Ministry of Health High Suspicion of Cancer Definitions](#)
- [Reducing cancer inequalities in Māori a priority](#)
- [Best practices when providing care to Māori patients and their whānau](#)

6. Updates to this care map

Date of publication: October 2017

Review in 6 months post publication.

7. Irregular non-menstrual vaginal bleeding

NB: Māori and Pacific Island women have higher incidences of and mortality from endometrial and cervical cancers (Robson and Harris 2007; Harris et al 2012; McLeod et al 2011)

Irregular non-menstrual vaginal bleeding

Intermenstrual bleeding is defined as [1]:

- irregular episodes of bleeding, often light and short, occurring between otherwise fairly normal menstrual periods

Post-coital bleeding is defined as [1]:

- bleeding post-intercourse

Epidemiological evidence suggests that an alteration in the menstrual cycle, intermenstrual bleeding, or post-coital bleeding may be the first symptoms of gynaecological cancer and indicate the need for a pelvic examination – persistent intermenstrual bleeding requires investigation to exclude malignancy [5].

References:

Please see the care map's Provenance.

8. Level of understanding and engagement

Apply health literacy principles:

Is English their second language, ask what the patient understands:

- is an interpreter required?
 - call **Interpreter Services – Language Line** (Nationwide) 0800 656 656 Monday to Friday, 9am to 6pm, Saturday 9am to 2pm
- build on what the patient already knows
- translate medical terminology into lay language (do they have a support person)
- draw diagrams or write key phrases and messages down and give it to the patient to take with them
- provide educational material
- check the patient's understanding to confirm that they understand the key messages (or confirm with support person if required)
- encourage patient to bring trusted support people to future consultations
- consider other health literacy resources as appropriate:
 - Local community [Māori Health Services](#)

- [Best practices when providing care to Māori patients and their whānau](#)
- Local community [Pasifika Health Services](#)
- [LETS PLAN](#) is a resource to help plan your next health care visit. It will help you understand more about your health and treatment for an illness or injury

Barriers to effective care:

Factors that could stop the patient from getting further tests or treatment can include:

- complexity of care pathway not knowing when or where to go next
- cost
- locality and geographical access to health and hospital services (travel)
- no Whānau / family support
- family obligations including dependents
- work responsibilities (can't take time off)

Discuss options of referral to available supportive care services. For more information see the '**referral to support services**' box within this pathway.

9. History

Ask about:

- sexual abuse (historical or current)
 - social
 - domestic violence
 - alcohol and drug use
- the amount, frequency, and regularity of bleeding [1]
- check documentation from cervical screening
- the presence of:
 - post-coital bleeding [1]
 - intermenstrual bleeding [1]
 - dysmenorrhoea [1]
 - abdominal or pelvic pain [2]
 - dyspareunia [2]
 - heavy menstrual bleeding [2]
 - premenstrual symptoms [1]
 - possibility of pregnancy [2]
- symptoms suggestive of anaemia, eg [1]:
 - light-headedness
 - shortness of breath with activity
- sexual and reproductive history, eg [1]:
 - contraception
 - risk for pregnancy
 - sexually transmitted infections (STIs)
 - desire for future pregnancy
 - infertility
 - cervical screening
- risk of STI – risk is higher if [2]:
 - younger than age 25 years; or
 - new partner; or

- more than one partner in the last year
- impact on social and sexual functioning and quality of life [1]
- symptoms suggestive of systemic causes of bleeding, such as [1]:
 - hypothyroidism
 - hyperprolactinemia
 - coagulation disorders
 - polycystic ovary syndrome
 - adrenal or hypothalamic disorders
- any associated symptoms, such as [1]:
 - vaginal discharge
 - odour
 - pelvic pain or pressure
- medications that may interfere with bleeding or contraception [1,2]
- contraception history [2]:
 - method used
 - duration of use
 - compliance
 - illness or a condition that may affect absorption of orally administered hormone

References:

Please see the care map's Provenance.

10. Post-coital bleeding (PCB)

PCB:

- is the cardinal sign of cervical neoplasia [17,22]:
 - however, other causes such as chlamydia infection are more likely in younger women [17]
- in the rare cases of cervical cancer in women younger than age 25 years, delays in diagnosis are relatively common [18]

References:

Please see the care map's Provenance.

11. Intermenstrual or breakthrough bleeding

Intermenstrual or breakthrough bleeding:

12. RED FLAGS! – suspected cancer

High Suspicion of Cancer

Rule out cervical cancer. Always view the cervix and refer if abnormal appearance even if the cervical smear is normal. Consider endometrial causes e.g., endometrial cancer or hyperplasia.

The following symptoms and signs may be the first symptoms of cancer and indicate the need for further investigation:

- persistent intermenstrual bleeding [5]
- post-coital bleeding [5]
- post-menopausal bleeding (PMB) [4]

- visible haematuria [4]
- unexplained vaginal discharge [4]
- palpable abdominal mass that is not obviously fibroids [6]
- unexplained vulval lump, ulceration or bleeding [4]
- pelvic pain or pressure symptoms [5]
- anaemia [4]

Ministry of Health

View the Gynaecological definition (including red flags and risk factors) for high suspicion of cancer:

- [Faster Cancer Treatment: High suspicion of cancer definitions April 2016](#)

References:

Please see the care map's Provenance.

13. Examination

Examination: all women with post-coital bleeding should be offered a:

- consider pregnancy test if indicated
 - urine dipstick
- cervical smear
- pelvic examination
- STI Swab

References: [17,18,21].

Please see the care map's Provenance.

14. Consider possible causes

Consider the following potential causes:

- very regular mid-cycle periovulatory light bleeding that causes unnecessary anxiety and does not require gynaecological assessment if the ultrasound is normal
- inaugural bleeding, ovulation less than normal, PCOS investigation
- cervical ectropion [18]
- endometrial polyps [6]
- endometrial hyperplasia [6]
- hormonal contraception [2]
- pregnancy, also including [2]:
 - ectopic pregnancy [24]
 - miscarriage [24]
- fibroids [2]
- cancers of the cervix or endometrium [2]:
- sexually transmitted infection (STI) [2]:
 - pelvic inflammatory disease [6]
 - *Chlamydia trachomatis* is the most common bacterial STI and is a likely cause of post-coital and irregular bleeding [2,17]
- risk factors for STIs include [2]:
 - younger than age 25 years; or
 - a new sexual partner; or
 - more than one partner in the last year

- coagulopathy [11]
- iatrogenic [11]

References:

Please see the care map's Provenance.

15. Consider further investigations and/or referral

If there is any possibility of pregnancy, a test should be performed [1]:

- the test may need to be repeated depending on the last menstrual period [24]

If appearances are not suspicious of cancer:

- if a local, benign cause is found, such as a polyp or ectropion, treat or refer to gynaecology [18,21]
- test for sexually transmitted infection, eg chlamydia [18,21,22]:
 - treat infection if found [18]
 - refer to gynaecology if:
 - chlamydia test is negative and no local cause is found [21]
 - if symptoms persist despite treatment of infection [18]

NB: For the management of post-menopausal women with post-coital bleeding, see the 'Abnormal vaginal bleeding' page.

References:

Please see the care map's Provenance.

16. Refer urgently to Gynaecologist

Refer urgently to Gynaecologist

Include relevant information:

- ethnicity
- reason for referral
- expectation of referral
- history and co-morbidities
- current management and/or options already pursued
- examination findings
- investigation results
- current medication
- allergies and adverse drug reactions
- any other relevant clinical information

Please complete the ***High Suspicion of Cancer referral form*** in your patient management system.

A copy of the form can also be printed [here](#).

NB: Timely feedback (by way of a phone call and/or followed up with a written report) to the person being referred to specialist services will be appreciated.

17. Woman using hormonal contraception

Woman using hormonal contraception:

- endometrial cancers are rare in women of reproductive age who are using hormonal contraception and who do not have risk factors [2].

Reference:

Please see the care map's Provenance.

19. Refer to Gynaecology Clinic

Refer to Gynaecologist

Include relevant information:

- ethnicity
- reason for referral
- expectation of referral
- history and co-morbidities
- current management and/or options already pursued
- examination findings
- investigation results
- current medication
- allergies and adverse drug reactions
- any other relevant clinical information

NB: Offer patient option of referring to support services (see 'referral to support services' box within pathway)

Please complete the **High Suspicion of Cancer referral form** in your patient management system.

A copy of the form can also be printed [here](#).

NB: Timely feedback (by way of a phone call and/or followed up with a written report) to the person being referred to specialist services will be appreciated.

20. RED FLAG! – suspected cancer

High Suspicion of Cancer.

Rule out cervical cancer. Always view the cervix and refer if abnormal appearance even if the cervical smear is normal. Consider endometrial causes e.g. endometrial cancer or hyperplasia.

The following symptoms and signs may be the first symptoms of cancer and indicate the need for further investigation:

- persistent intermenstrual bleeding [5]
- post-coital bleeding [5]
- post-menopausal bleeding (PMB) [4]
- visible haematuria [4]
- unexplained vaginal discharge [4]
- palpable abdominal mass that is not obviously fibroids [6]
- unexplained vulval lump, ulceration or bleeding [4]

- pelvic pain or pressure symptoms [5]
- anaemia [4]

Ministry of Health

View the Gynaecological definition (including red flags and risk factors) for high suspicion of cancer:

- [Faster Cancer Treatment: High suspicion of cancer definitions April 2016](#)

References:

Please see the care map's Provenance.

21. Expected bleeding patterns

Before starting hormonal contraception, women should be advised about the bleeding patterns expected both initially and in the longer term [2]:

- if bleeding patterns fall outside of the expected 'normal' patterns associated with different contraceptive methods, examination, investigation, or treatment may be indicated

Expected bleeding patterns when using the following contraceptives are as follows [2]:

- combined hormonal contraception:

- up to 20% of combined oral contraceptive (COC) users experience irregular bleeding in the first 3 months of use
- in the longer term:
 - irregular bleeding usually settles

- progestogen-only pill (POP):

- bleeding is unpredictable – one-third of women have a change in bleeding when using traditional POP
- in the longer term bleeding may not settle with time:
- NB: traditional POP users can be advised that frequent and irregular bleeding are common, while prolonged bleeding and amenorrhoea are less likely

- progestogen-only injectable:

- bleeding disturbances, eg spotting, light, heavy, or prolonged bleeding are common
- around 1 in 10 women may be amenorrhoeic
- in the longer term – rates of amenorrhoea increase with duration of use
- specify depo provera

- progestogen-only implant:

- bleeding disturbances are common in the first 3 months of use:
 - NB: the bleeding pattern in the first 3 months is broadly predictive of future bleeding patterns for many women
- in the longer term, around:
 - 2 in 10 women are amenorrhoeic
 - 3 in 10 women have infrequent bleeding
 - fewer than 1 in 10 women have frequent bleeding
 - 2 in 10 women have prolonged bleeding

- levonorgestrel releasing intrauterine system (LNG-IUS) – Mirena®:

- infrequent and erratic bleeding/spotting is common after insertion in the first few months
- in the longer term:
 - there is a decrease over time in the number of bleeding and spotting days with all doses of LNG-IUS
 - a 90% reduction in menstrual blood loss has been demonstrated over 12 months of 52mg LNG-IUS use
 - at 1 year, infrequent bleeding is usual with the LNG-IUS and some women will be amenorrhoeic
 - 24% of 52mg LNG-IUS users are amenorrhoeic at 3 years

- LNG-IUS – Jaydess®:

- frequent bleeding/spotting is common in the first few months after insertion
- in the longer term:
 - there is a decrease over time in the number of bleeding and spotting days with all doses of LNG-IUS
 - users of the 13.5mg LNG-IUS report more spotting days than bleeding days over the duration of licensed use
 - fewer women (13% at 3 years) will experience amenorrhoea with this dose of LNG-IUS compared to the 52mg LNG-IUS

Reference:

Please see the care map's Provenance.

22. Examination

If there is no suspected contraceptive problem, speculum and pelvic examination is recommended [18].

Examination may also include [1]:

- weight/body mass index
- thyroid exam (including bloods)
- skin exam, eg:
 - pallor
 - bruising
- abdominal exam – to check for mass or hepatosplenomegaly
- gynaecological exam

References:

Please see the care map's Provenance.

23. Consider further investigations and/or referral

In all women [1]:

- if there is any possibility of pregnancy, a test should be performed [1]:
 - the test may need to be repeated depending on the last menstrual period [24]
- test for sexually transmitted infection if at risk [1]
- thyroid function tests are not indicated unless there are clinical findings suggestive of thyroid disease [1]
- consider increasing progestogen or adding brevinol 1 (if able to take COC)
- combine Jadelle and COC (if able to take COC) - 3 month, long term use is ok

Refer:

- to gynaecology for biopsy if intermenstrual bleeding is persistent [1,5]
- to gynaecology if on examination a local, benign cause is found, such as a polyp or ectropion [18]
- to gynaecology/genito-urinary medicine (GUM) according to local guidance if infection is found and treated but symptoms persist [18]:
 - NB: it is always beneficial to refer to GUM in cases of sexually transmitted infection for contact tracing [24]
- using an urgent suspected cancer pathway referral, for an appointment within 2 weeks, if the appearance of the cervix is suspicious of cervical cancer [4]:
 - a smear test is not required before referral and referral should not be delayed by a previous negative result [9]
 - if there is uncertainty about whether a referral is needed, consider asking a specialist for advice and guidance [4]

References:

Please see the care map's Provenance.

24. Refer urgently to Gynaecologist

Refer to Gynaecologist

Include relevant information:

- ethnicity
- reason for referral
- expectation of referral
- history and co-morbidities
- current management and/or options already pursued
- examination findings
- investigation results
- current medication
- allergies and adverse drug reactions
- any other relevant clinical information

Please complete the **High Suspicion of Cancer referral form** in your patient management system.

A copy of the form can also be printed [here](#).

NB: Timely feedback (by way of a phone call and/or followed up with a written report) to the person being referred to specialist services will be appreciated.

25. Less than 3 months since starting method – initial assessment

Test for chlamydia if at risk of sexually transmitted infection, ie [2]:

- age younger than 25 years; or
- new partner; or
- more than one partner in the last year
- a history of [24]: drug or alcohol abuse; or
- domestic abuse

NB: gonorrhoea testing depends on:

- sexual risk
- availability of dual test
- local prevalence

Carry out:

- a cervical smear if eligible for, but has not been participating in, a cervical screening programme [2]
- a pregnancy test if sexually active [2]:
 - the test may need to be repeated depending on the last menstrual period [24]

In all cases a speculum examination (and do a bi-annual) to visualise the cervix is warranted if [2]:

- a woman has not participated in a national screening programme
- requested by the woman
- there are symptoms, such as:

- pain
- dyspareunia
- post-coital bleeding

NB: these symptoms would also warrant a bimanual examination

If a structural abnormality, such as polyps, fibroids, or ovarian cysts, is suspected [2]

- a transvaginal ultrasound scan and/or hysteroscopy may be indicated

Reference:

Please see the care map's Provenance.

26. More than 3 months since starting method – initial assessment

Test for chlamydia if at risk of sexually transmitted infection, ie [2]:

- age younger than 25 years; or
- new partner; or
- more than one partner in the last year
- a history of [24]:
 - drug or alcohol abuse; or
 - domestic abuse
- NB: gonorrhoea testing depends on:
 - sexual risk
 - availability of dual test
 - local prevalence

Carry out [2]:

- a cervical smear if eligible for, but has not been participating in, a cervical screening programme
- a pregnancy test if sexually active:
 - the test may need to be repeated depending on the last menstrual period [24]

A speculum examination to visualise the cervix is warranted for women in most cases with [2]:

- bleeding that persists beyond the first 3 months of use
- new symptoms or a change in bleeding after the first 3 months of use

References:

Please see the care map's Provenance.

27. Refer for Ultrasound Scan

Refer for Ultrasound Scan and refer to gynaecology.

- Add costing details and location

28. Management

Provided causes other than the method of contraception have been considered and excluded (see initial assessment care point),

reassure and arrange a follow-up [2]:

- it is not generally recommended that a combined oral contraceptive pill is changed within the first 3 months of use, as bleeding disturbances often settle in this time [2]
- if requested, medical management can be considered [2] – see 'Consider medical management' care point
- consider ALL IUD's

In all women, if the appearance of the cervix is suspicious of cervical cancer, consider an urgent suspected cancer pathway referral, for an appointment within 2 weeks [4]:

- a smear test is not required before referral, and referral should not be delayed by a previous negative result [9]
- if there is uncertainty about whether a referral is needed, consider discussing with a specialist [4]

NB: levonorgestrel releasing intrauterine system (LNG-IUS) users with pain, discharge, or non-visible threads in addition to bleeding require investigation to exclude expulsion, perforation, or infection [2] – symptoms of perforation can include [16]:

- severe pelvic pain after insertion – worse than period cramps
- pain associated with heavy bleeding after insertion
- heavy bleeding may continue for up to 3 months
- sudden changes in periods
- pain during intercourse
- not being able to feel the threads

References:

Please see the care map's Provenance.

29. Consider further investigation/referral

In all women, if the appearance of the cervix is suspicious of cervical cancer, consider an urgent suspected cancer pathway referral for an appointment within 2 weeks [4]:

- a smear test is not required before referral, and referral should not be delayed by a previous negative result [9]
- if there is uncertainty about whether a referral is needed, consider asking for advice and guidance from a specialist [4]

If findings are normal, but symptoms include pain, dyspareunia, and/or heavy bleeding consider referral for further assessment, eg ultrasound, biopsy, hysteroscopy [2].

Consider referral for endometrial biopsy and/or hysteroscopy in women with persistent problematic bleeding after the first 3 months of use of a hormonal contraceptive method if they have the following risk factors for endometrial cancer eg [2]:

- over age of 35 for Māori
 - over age of 45 for European
 - consider other ethnicities
- obesity
- polycystic ovary syndrome
- diabetes

If a structural abnormality, such as polyps, fibroids, or ovarian cysts, is suspected [2]:

- a transvaginal ultrasound scan and/or hysteroscopy may be indicated

References:

Please see the care map's Provenance.

30. Refer to Gynaecology Clinic

Refer:

- to gynaecology for biopsy if intermenstrual bleeding is persistent [1,5]
- to gynaecology if on examination a local, benign cause is found, such as a polyp or ectropion [18]
- to gynaecology/genito-urinary medicine (GUM) according to local guidance if infection is found and treated but symptoms persist [18]:
 - NB: it is always beneficial to refer to GUM in cases of sexually transmitted infection for contact tracing [24]
- using an urgent suspected cancer pathway referral, for an appointment within 2 weeks, if the appearance of the cervix is suspicious of cervical cancer [4]:
 - a smear test is not required before referral and referral should not be delayed by a previous negative result [9]
 - if there is uncertainty about whether a referral is needed, consider asking a specialist for advice and guidance [4]

Include relevant information:

- ethnicity
- a history of:
 - drug or alcohol abuse; or
 - domestic abuse
- reason for referral
- expectation of referral
- history and co-morbidities
- current management and/or options already pursued
- examination findings
- investigation results
- current medication
- allergies and adverse drug reactions
- any other relevant clinical information

Please complete the ***High Suspicion of Cancer referral form*** in your patient management system.

A copy of the form can also be printed [here](#).

NB: Timely feedback (by way of a phone call and/or followed up with a written report) to the person being referred to specialist services will be appreciated.

31. Consider medical management

Combined hormonal contraception users [2]:

- review pill taking (if the patient is continuously pill taking without a monthly pill free interval, putting back the pill free interval will reduce intermenstrual bleeding)
- continue with the same pill for at least 3 months, as bleeding may settle in time
- use a combined oral contraceptive (COC) with a dose of ethinylestradiol (EE) to provide the best cycle control
- could consider increasing the EE dose up to a maximum of 35 micrograms
- although there is no evidence for switching pills or changing the progestogen dose or type, it may help the individual
- consider increasing progesterone e.g. BRevinor 1
- combine Jadell and COC - 3 month, L/T ok today

Progestogen-only contraception [2]:

- bleeding is common in the initial months of a progestogen-only method

- however, treatment can be considered if it encourages the patient to continue with the method
- progestogen-only pill (POP):
 - although there is no evidence that changing the POP will improve bleeding problems, patterns may vary with different preparations and so may help individuals
 - there is no evidence to support the following to improve bleeding patterns:
 - the use of two POPs per day
 - the routine use of estrogen supplementation or tranexamic acid
- progestogen-only injectable:
 - mefenamic acid taken for 5 days may reduce the length of a bleeding episode
 - a first-line COC can be considered for up to 3 months continuously or in the usual cyclical regime (unlicensed):
 - there is no evidence that reducing the injection interval improves bleeding:
 - however, depot medroxyprogesterone acetate (DMPA) may be given after a 10-week interval:
 - NB: the use of DMPA for this indication is outside of its marketing authorisation (product licence) in the UK
- progestogen-only implant and intrauterine system:
 - a first-line COC can be considered for up to 3 months continuously or in the usual cyclical regime (unlicensed):
 - NB: persistent bleeding is common in the first 6 months of use with these methods

References:

Please see the care map's Provenance.

32. Refer for Ultrasound Scan

Refer for Ultrasound Scan and refer to gynaecology.

- Add costing details and location**

33. Referral to supportive care services

He Anga Whakaahuru - Supportive Care Framework [5]

Improving the quality of life for those with cancer, their family and whānau through support, rehabilitation and palliative care - the essential services required to meet a person's physical, social, cultural, emotional, nutritional, informational, psychological, spiritual and practical needs throughout their experience with cancer.

[Further information on the Standards and Competencies](#)

Support Services:

1. [Community Cancer Nurses](#) Community-based cancer support service is provided to:

- anyone with a possible, probable or definite diagnosis of cancer and are enrolled with a PHO and/or is a resident in the PHO area

Māori Community Cancer Coordinators - community-based Māori cancer support services:

- Te Wakahuia (Palmerston North, Manawatu)Phone: 06 3573400
- Best Care Whakapai Hauora (Palmerston North)06 3536385 Ext 773
- Te Rānanga o Raukawa (Otaki, Horowhenua)Phone: 06 3688679
- Te Kete Hauora (Tararua)Phone: 06 3746860
- [referral form](#)

2. Pae Ora Māori Health Service:

- kaupapa Māori community and hospital based navigation service

- [referral form](#) and contact details

3. MidCentral CNS Gynaecology Nurse:

- 06 356 9169 Ext 9608

4. Cancer Society:

- for additional support services phone the cancer information nurses on the **Cancer Information Helpline 0800 226 2374**

5. [Central Region Cancer Services Directory](#):

The directory provides a list of cancer support services available across MidCentral, Whanganui and Hawke's Bay including:

- ethnic and cultural
- accommodation
- disability support
- government health services
- medication
- legal advice

6. Social Workers Oncology

- We can support you and your family/whānau as you come to terms with your diagnosis and the impact it may have in your day-to-day life, now and in the future

- for [more information and contact details](#)

7. Cancer Psychology Service (Massey): [Te Ara Whatumanawa](#). We work with people and their whānau/family at all stages of the cancer journey, from diagnosis to treatment and beyond.

- free service
- 06 3505180
- [referral form](#)

8. Regional Cancer Treatment Service (RCTS):

Cancer treatment services are provided to patients in Taranaki, Whanganui, Tarawhiti, Hawkes Bay and MidCentral District Health Boards by the Regional Cancer Treatment Service (RCTS):

- for more information go to [website](#)

Reference: He Anga Whakaahuru - Supportive Care Framework [5]

34. Follow-up - reassess

Continue with the method of contraception if the bleeding settles [2].

If young person, consider possibility of NOT delaying examination.

Carry out a speculum examination to visualise the cervix if [2]:

- bleeding persists beyond the first 3 months of use
- there are new symptoms or a change in bleeding after the first 3 months of use
- medical treatment fails

References:

Please see the care map's Provenance.

35. Refer to Gynaecology Clinic

Refer:

- to gynaecology for biopsy if intermenstrual bleeding is persistent [1,5]
- to gynaecology if on examination a local, benign cause is found, such as a polyp or ectropion [18]
- to gynaecology/genito-urinary medicine (GUM) according to local guidance if infection is found and treated but symptoms persist [18]:

- NB: it is always beneficial to refer to GUM in cases of sexually transmitted infection for contact tracing [24]
- using an urgent suspected cancer pathway referral, for an appointment within 2 weeks, if the appearance of the cervix is suspicious of cervical cancer [4]:
 - a smear test is not required before referral and referral should not be delayed by a previous negative result [9]
 - if there is uncertainty about whether a referral is needed, consider asking a specialist for advice and guidance [4]

Include relevant information:

- ethnicity
- a history of:
 - drug or alcohol abuse; or
 - domestic abuse
- reason for referral
- expectation of referral
- history and co-morbidities
- current management and/or options already pursued
- examination findings
- investigation results
- current medication
- allergies and adverse drug reactions
- any other relevant clinical information

Please complete the **High Suspicion of Cancer referral form** in your patient management system.

A copy of the form can also be printed [here](#).

NB: Timely feedback (by way of a phone call and/or followed up with a written report) to the person being referred to specialist services will be appreciated.

36. Consider medical management

If examination findings are normal, no other symptoms are present, and there are no indications for further investigation/referral, consider medical management [2].

Combined hormonal contraception users [2]:

- continue with the same pill for at least 3 months, as bleeding may settle in time
- use a combined oral contraceptive (COC) with a dose of ethinylestradiol (EE) to provide the best cycle control
- could consider increasing the EE dose up to a maximum of 35 micrograms
- although there is no evidence for switching pills or changing the progestogen dose or type, it may help the individual

Progestogen-only contraception [2]:

- bleeding is common in the initial months of a progestogen-only method
- however, treatment can be considered if it encourages the patient to continue with the method

- progestogen-only pill (POP):
 - although there is no evidence that changing the POP will improve bleeding problems, patterns may vary with different preparations and so may help individuals
 - there is no evidence to support the following to improve bleeding patterns:
 - the use of two POPs per day
 - the routine use of estrogen supplementation or tranexamic acid
- progestogen-only injectable:
 - mefenamic acid taken for 5 days may reduce the length of a bleeding episode
 - a first-line COC can be considered for up to 3 months continuously or in the usual cyclical regime (unlicensed):
 - there is no evidence that reducing the injection interval improves bleeding:
 - however, depot medroxyprogesterone acetate (DMPA) may be given after a 10-week interval
- progestogen-only implant and intrauterine system:
 - a first-line COC can be considered for up to 3 months continuously or in the usual cyclical regime (unlicensed):
 - **persistent bleeding is common in the first 6 months of use with these methods**
- NB: longer-term use of the COC for managing problematic bleeding in women using progestogen-only methods has not been studied:
 - if bleeding recurs after 3 months, longer-term use is a matter of clinical judgement

References:

Please see the care map's Provenance.

37. Referral to supportive care services

He Anga Whakaahuru - Supportive Care Framework [5]

Improving the quality of life for those with cancer, their family and whānau through support, rehabilitation and palliative care - the essential services required to meet a person's physical, social, cultural, emotional, nutritional, informational, psychological, spiritual and practical needs throughout their experience with cancer.

[Further information on the Standards and Competencies](#)

Support Services:

1. [Community Cancer Nurses](#) Community-based cancer support service is provided to:

- anyone with a possible, probable or definite diagnosis of cancer and are enrolled with a PHO and/or is a resident in the PHO area

Māori Community Cancer Coordinators - community-based Māori cancer support services:

- Te Wakahuia (Palmerston North, Manawatu)Phone: 06 3573400
- Best Care Whakapai Hauora (Palmerston North)06 3536385 Ext 773
- Te Rānanga o Raukawa (Otaki, Horowhenua) Phone: 06 3688679
- Te Kete Hauora (Tararua)Phone: 06 3746860
- [referral form](#)

2. Pae Ora Māori Health Service:

- kaupapa Māori community and hospital based navigation service
- [referral form](#) and contact details

3. MidCentral CNS Gynaecology Nurse:

- 06 356 9169 Ext 9608

4. Cancer Society:

- for additional support services phone the cancer information nurses on the **Cancer Information Helpline 0800 226 2374**

5. Central Region Cancer Services Directory:

The directory provides a list of cancer support services available across MidCentral, Whanganui and Hawke's Bay including:

- ethnic and cultural
- accommodation
- disability support
- government health services
- medication
- legal advice

6. Social Workers Oncology

- We can support you and your family/whānau as you come to terms with your diagnosis and the impact it may have in your day-to-day life, now and in the future
- for [more information and contact details](#)

7. Cancer Psychology Service (Massey): [Te Ara Whatumana](#). We work with people and their whānau/family at all stages of the cancer journey, from diagnosis to treatment and beyond.

- free service
- 06 3505180
- [referral form](#)

8. Regional Cancer Treatment Service (RCTS):

Cancer treatment services are provided to patients in Taranaki, Whanganui, Tarawhiti, Hawkes Bay and MidCentral District Health Boards by the Regional Cancer Treatment Service (RCTS):

- for more information go to [website](#)

Reference: He Anga Whakaahuru - Supportive Care Framework [5]

38. Follow-up - reassess

A speculum examination to visualise the cervix is warranted if [2]:

- there are new symptoms or a change in bleeding after the first 3 months of use
- medical treatment has failed

In all women, if the appearance of the cervix is suspicious of cervical cancer, consider an urgent suspected cancer pathway referral for an appointment within 2 weeks [4]:

- a smear test is not required before referral, and referral should not be delayed by a previous negative result [9]
- if there is uncertainty about whether a referral is needed, consider asking for advice and guidance from a specialist [4]

If findings are normal, but symptoms include pain, dyspareunia, and/or heavy bleeding, or patient is age 45 years and over, consider referral for further assessment, eg ultrasound, biopsy, hysteroscopy [2].

Consider referral for endometrial biopsy and/or hysteroscopy in women with persistent problematic bleeding after the first 3 months of use of a hormonal contraceptive method if they are [2]:

- over age of 35 for Maori
- over age of 45 for European
- consider other ethnicities

- younger than age 45 years with risk factors for endometrial cancer eg:
 - obesity
 - polycystic ovary syndrome
 - diabetes

If a structural abnormality is suspected [2]:

- a transvaginal ultrasound scan and/or a hysteroscopy may be indicated

References:

Please see the care map's Provenance.

Abnormal Vaginal Bleeding Pathways (Post Coital and Intermenstrual Bleeding, Post Menopausal Bleeding, Heavy Menstrual Bleeding)

Provenance Certificate

[Overview](#) | [Editorial](#) | [Reference](#) | [Contributors](#) | [Disclaimers](#)

Overview

This document describes the provenance of the Sub-region Districts (MidCentral, Whanganui and Hawke's Bay District Health Boards) Post Coital and Intermenstrual Bleeding Pathway.

The purpose of implementing cancer pathways in our Districts is to:

- Reduce barriers so that all people with cancer are able to access the same quality care within the same timeframes, irrespective of their ethnicity, gender, locality or socio-economic status
- Achieve the faster cancer treatment (FCT) health target – 85% of patient receive their first cancer treatment (or other management) within 62 days of being referred with a high suspicion of cancer and a need to be seen within two weeks by July 2016, increasing to 90% by June 2017
- Implement the national tumour standards of service provision, developed as part of the FCT programme, to support the delivery of standardised quality care for all people with cancer
- Improve equity along the cancer pathway
- Clarify expectations across providers
- Improve communications and follow up care for cancer patients

To cite this pathway, use the following format:

Obstetrics and Gynaecology/Gynaecology/Abnormal Vaginal Bleeding

Editorial methodology

This care map was based on high-quality information and known Best Practice guidelines from New Zealand and around the world including Map of medicine editorial methodology. It has been checked by individuals with front-line clinical experience (see contributors section of this document).

Map of Medicine pathways are constantly updated in response to new evidence. Continuous evidence searching means that pathways can be updated rapidly in response to any change in the information landscape. Indexed and grey literature is monitored for new evidence, and feedback is collected from users year-round. The information is triaged so that important changes to the information landscape are incorporated into the pathways through the quarterly publication cycle.

References

This care map has been developed according to the Map of Medicine editorial methodology. The content of this care map is based on high-quality guidelines and practice-based knowledge provided by contributors with front-line clinical experience. This sub-region version of the evidence-based, practice-informed care map has been peer-reviewed by stakeholder groups and the CCP Programme Clinical Lead.

1. Singh S, Best C, Dunn S et al. Abnormal Uterine Bleeding in Pre-Menopausal Women. Ottawa, ON, Canada: The Society of Obstetricians and Gynaecologists of Canada; 2013. Available from: <http://sogc.org/wp-content/uploads/2013/07/gui292CPG1305E.pdf> [G]
2. Faculty of Sexual and Reproductive Healthcare (FSRH). Problematic Bleeding with Hormonal Contraception. London: FSRH; 2015. Available from: <http://www.fsrh.org/pdfs/CEUGuidanceProblematicBleedingHormonalContraception.pdf> [G]
3. Clinical Knowledge Summaries (CKS). Amenorrhoea. July 2014. Newcastle upon Tyne: CKS; 2014. Available from: <http://cks.nice.org.uk/amenorrhoea> [G]
4. National Collaborating Centre for Cancer (NCC-C). Suspected cancer: recognition and referral. NICE guideline 12. London: NCC-C; 2015. Available from: <http://www.nice.org.uk/guidance/ng12/evidence/full-guidance-74333341> [G]
5. National Collaborating Centre for Women's and Children's Health (NCCWCH). Heavy menstrual bleeding. London: NCCWCH; 2007. Available from: <http://www.nice.org.uk/guidance/cg44/evidence/full-guideline-195071293> [G]
6. Clinical Knowledge Summaries (CKS). Menorrhagia. August 2015. Newcastle upon Tyne: CKS; 2015. Available from: <http://cks.nice.org.uk/menorrhagia> [G]
7. Healthcare Improvement Scotland (HIS). Scottish referral guidelines for suspected cancer. Edinburgh: HIS; 2014. Available from: http://www.healthcareimprovementscotland.org/our_work/cancer_care_improvement/programme_resources/scottish_referral_guidelines.aspx [G]
8. National Institute for Health and Care Excellence (NICE). Menopause: diagnosis and management. NICE guideline 23. London: NICE; 2015. Available from: <http://www.nice.org.uk/guidance/ng23/resources/menopause-diagnosis-and-management-1837330217413> [G]
9. Macmillan Cancer Support. Rapid Referral Guidelines. July 2015 edition. 2015. Available from: http://www.macmillan.org.uk/Documents/AboutUs/Health_professionals/PCCL/Rapid_referralguidelines.pdf [G]
10. Clinical Knowledge Summaries (CKS). Cervical cancer and HPV. March 2014. Newcastle upon Tyne: CKS; 2014. Available from: <http://cks.nice.org.uk/cervical-cancer-and-hpv> [G]
11. The American College of Obstetricians and Gynaecologists (ACOG). Management of Acute Abnormal Uterine Bleeding in Nonpregnant Reproductive-Aged Women. Washington, DC, United States of America: ACOG; 2013. Available from: <http://www.acog.org/-/media/Committee-Opinions/Committee-on-Gynecologic-Practice/co557.pdf?dmc=1&ts=20150921T1129401771> [G]
12. Qiu J, Cheng J, Wang Q et al. Levonorgestrel-releasing intrauterine system versus medical therapy for menorrhagia: a systematic review and meta-analysis. *Med Sci Monit* 2014; 20: 1700-13. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25245843> [S]
13. Lethaby A, Hussain M, Rishworth JR et al. Progesterone or progestogen-releasing intrauterine systems for heavy menstrual bleeding (Review). *Cochrane Database Syst Rev* 2015; 4: CD002126. Available from:

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002126.pub3/epdf> [S]

14. Royal College of Obstetricians and Gynaecologists (RCOG). Long-term Consequences of Polycystic Ovary Syndrome. Green-top Guideline No.33. London: RCOG; 2014. Available from: https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_33.pdf [G]
15. Clinical Knowledge Summaries (CKS). Polycystic ovary syndrome. February 2013. Newcastle upon Tyne: CKS; 2013. Available from: <http://cks.nice.org.uk/polycystic-ovary-syndrome#!topicsummary> [G]
16. Medicines and Healthcare products Regulatory Agency (MHRA). Intrauterine contraception: uterine perforation—updated information on risk factors. Drug Safety Update; June, 2015: vol8, issue 11. Available from: <https://www.gov.uk/drug-safety-update/intrauterine-contraception-uterine-perforation-updated-information-on-risk-factors> [G]
17. Public Health England (PHE). NHS Cervical Screening Programme. Colposcopy and Programme Management. Third Edition March 2016. London: PHE; 2016. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/508133/NHS_CSP_20_3rd_ed.pdf [G]
18. Department of Health (DH). Clinical Practice Guidance for the Assessment of Young Women aged 20-24 with Abnormal Vaginal Bleeding. London: DH; 2010. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/436924/do-h-guidelines-young-women.pdf [G]
19. National Institute for Health and Clinical Excellence (NICE), National Collaborating Centre for Women's and Children's Health (NCCWCH). Long-acting reversible contraception: the effective and appropriate use of long-acting reversible contraception. London: Royal College of Obstetricians and Gynaecologists (RCOG) Press; 2013. Available from: <https://www.nice.org.uk/guidance/cg30/evidence/full-guideline-194840605> [G]
20. Hickey M, Higham JM, Fraser I. Progestogens with or without oestrogen for irregular uterine bleeding associated with anovulation. Cochrane Database Syst Rev 2012; 9: CD001895. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22972055> [S]
21. Scottish Intercollegiate Guidelines Network (SIGN). Management of cervical cancer. A national clinical guideline. Edinburgh: SIGN; 2008. Available from: <http://www.sign.ac.uk/pdf/sign99.pdf> [G]
22. The Royal Australian College of Obstetricians and Gynaecologists (RANZOG). Investigation of intermenstrual and postcoital bleeding. East Melbourne, Australia: RANZCOG; 2015. Available from: <http://www.ranzcog.edu.au/college-statements-guidelines.html> [G]
23. British National Formulary (BNF). BNF March 2016. London: BMJ Group and RPS Publishing; 2016. Available from: <https://www.evidence.nhs.uk/formulary/bnf/current> [G]
24. Practice-informed recommendations, including contributors representing the Royal College of General Practitioners (RCGP); 2016. [E]
25. Faculty of Sexual and Reproductive Healthcare (FSRH). UK Medical Eligibility Criteria for Contraceptive Use. London: FSRH; 2009. Available from: <http://www.fsrh.org/pdfs/UKMEC2009.pdf> [G]
26. Clinical Knowledge Summaries (CKS). Fibroids. February 2013. Newcastle upon Tyne: CKS; 2013. Available from: <http://cks.nice.org.uk/fibroids> [G]

The classification employed by Map of Medicine is as follows:

- [G] guideline
- [M] meta-analysis
- [S] systematic review
- [A] randomised controlled trial
- [B] nonrandomised prospective study
- [C] retrospective study
- [Q] cost- or decision-analysis
- [P] performance measure or policy document
- [E] practice-based information (expert opinion)

Contributors

MidCentral DHB's Collaborative Clinical Pathway editors and facilitators worked with clinical stakeholders such as front-line clinicians and pharmacists to gather practice-based knowledge for its care maps.

The following individuals have contributed to this subregion care map:

- Digby Ngan Kee, Gynaecologist MidCentral DHB
- Gillian Forsyth, CNS Gynaecology, MidCentral DHB
- Tracy Haddon, Quality and Service Improvement Manager, Pae Ora Māori Health, MidCentral DHB
- Rebecca James, Clinical Nurse Manager Māori Health, MidCentral DHB
- Stephanie Fletcher, Project Manager, Central Cancer Network, MidCentral DHB
- Katherine Gibbs, Project Manager, MidCentral DHB
- Catherine Kelsey, CNS Gynaecology, Hawke's Bay DHB
- Elaine White, Consultant, Obstetrics and Gynaecology, Hawke's Bay DHB
- Keven Nevil, Consultant, Obstetrics and Gynaecology Whanganui DHB (Secondary Care Clinical Lead)
- Ruth Carter, General Practitioner, Whanganui Regional Health Network (Primary Care Clinical Lead)
- Ray Jackson, Project Director, Collaborative Clinical Pathways (Facilitator)
- Kim Vardon, Project Assistant, Collaborative Clinical Pathways (Editor)

The following individuals have contributed to this MidCentral care map:

- Gillian Forsyth, CNS Gynaecology, MidCentral DHB (Secondary Care Clinical Lead)
- Alex Herbert, General Practitioner, Whakapai Hauora (Primary Care Clinical Lead)
- Tracy Haddon, Quality and Service Improvement Manager, Pae Ora Māori Health, MidCentral DHB
- Rebecca James, Clinical Nurse Manager Māori Health, MidCentral DHB
- Chrissy Paul, Health Promotion and Cancer Support, Te Wakahui Trust
- Ray Jackson, Project Director, Collaborative Clinical Pathways (Facilitator/Editor)

Disclaimers

Clinical Board Central PHO, MidCentral DHB

It is not the function of the Clinical Board Central PHO, MidCentral DHB to substitute for the

role of the clinician, but to support the clinician in enabling access to know-how and knowledge. Users of the Map of Medicine are therefore urged to use their own professional judgement to ensure that the patient receives the best possible care.

Whilst reasonable efforts have been made to ensure the accuracy of the information on this online clinical knowledge resource, we cannot guarantee its correctness and completeness. The information on the Map of Medicine is subject to change and we cannot guarantee that it is up-to-date.

Abnormal Menstrual Bleeding Pathways

(Post Menopausal Bleeding, Heavy Menstrual Bleeding) Provenance Certificate

[Overview](#) | [Editorial](#) | [Reference](#) | [Contributors](#) | [Disclaimers](#)

Overview

This document describes the provenance of MidCentral District Health Board's Abnormal Menstrual Bleeding pathways.

This localised pathway was last updated in March 2016.

One feature of the "Better, Sooner, More Convenient" (BSMC) Business Case, accepted by the Ministry of Health in 2010, was the development of 33 collaborative clinical pathways (CCP).

The purpose of implementing the CCP Programme in our DHB is to:

- Help meet the Better Sooner More Convenient Business Case aspirational targets, particularly the following:
 - Reduce presentations to the Emergency Department (ED) by 30%
 - Reduce avoidable hospital admissions to Medical Wards and Assessment Treatment and Rehabilitation for over-65-year-olds by 20%
 - Reduce poly-pharmacy in the over-65-year-olds by 10%
- Implement a tool to assist in planning and development of health services across the district, using evidence-based clinical pathways.
- Provide front line clinicians and other key stakeholders with a rapidly accessible check of best practice;
- Enhance partnership processes between primary and secondary health care services across the DHB.

To cite this pathway, use the following format:

Map of Medicine. Medicine. MidCentral District View. Palmerston North: Map of Medicine; 2014 (Issue 1).

Editorial methodology

This care map was based on high-quality information and known Best Practice guidelines from New Zealand and around the world including Map of medicine editorial methodology. It has been checked by individuals with front-line clinical experience (see Contributors section of this document).

Map of Medicine pathways are constantly updated in response to new evidence. Continuous evidence searching means that pathways can be updated rapidly in response to any change in the information landscape. Indexed and grey literature is monitored for new evidence, and feedback is collected from users year-round. The information is triaged so that important changes to the information landscape are incorporated into the pathways through the quarterly publication cycle.

References

This care map has been developed according to the Map of Medicine editorial methodology. The content of this care map is based on high-quality guidelines and practice-based knowledge provided by contributors with front-line clinical experience. This localised version of the evidence-based, practice-informed care map has been peer-reviewed by stakeholder groups and the CCP Programme Clinical Lead.

1	National Institute for Health and Clinical Excellence (NICE), National Collaborating Centre for Women's and Children's Health. Long-acting reversible contraception: the effect and appropriate use of long-acting reversible contraception. London: Royal College of Obstetricians and Gynaecologists (RCOG) Press; 2005. Available from: http://www.nice.org.uk/nicemedia/live/10974/29909/29909.pdf [G]
2	Faculty of Sexual and Reproductive Healthcare (FSRH). Management of Unscheduled Bleeding in Women Using Hormonal Contraception. London: Royal College of Obstetricians and Gynaecologists (RCOG); 2009. Available from: http://www.fsrh.org/pdfs/UnscheduledBleedingMay09.pdf [G]
3	Scottish Intercollegiate Guidelines Network (SIGN). Investigation of post-menopausal bleeding. Edinburgh: 2002; 2002. Available from: http://www.sign.ac.uk/pdf/sign61.pdf [G]
4	Map of Medicine (MoM) Editorial Clinical team and Fellows. London: MoM; 2011. [E]
5	National Institute for Health and Clinical Excellence (NICE). Heavy menstrual bleeding CG44. London: NICE; 2007. Available from: http://guidance.nice.org.uk/nicemedia/live/11002/30401/30401.pdf [G]
6	Clinical Knowledge Summaries (CKS). Menorrhagia. Newcastle upon Tyne: CKS; 2007. Available from: http://www.cks.nhs.uk/menorrhagia [G]
7	Contributors invited by the Map of Medicine (MoM). 2011. [E]
8	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. <i>Obstet Gynecol</i> 2009; 113: 1104-16. Available from: http://www.ncbi.nlm.nih.gov/pubmed/19384127?dopt=Citation [S]
9	Lethaby A, Augood C, Duckitt K et al. Nonsteroidal anti-inflammatory drugs for heavy menstrual bleeding. <i>Cochrane Database Syst Rev</i> 2007; CD000400. Available from: http://www.ncbi.nlm.nih.gov/pubmed/17943741?dopt=Citation [S]
10	Contributors representing the Royal College of Obstetricians and Gynaecologists (RCOG). 2013. [E]
11	ACOG Committee Opinion No. 440. American College of Obstetricians and Gynecologists. <i>Obstet Gynecol</i> 2009; 114:409-11.

Contributors

MidCentral DHB's Collaborative Clinical Pathway editors and facilitators worked with clinical stakeholders such as front-line clinicians and pharmacists to gather practice-based knowledge for its care maps.

The following individuals have contributed to this care map:

- Digby Ngan Kee, Gynaecologist, MidCentral Health (Secondary Care Clinical Lead)

- Alex Herbert, General Practitioner, Whakapai Hauora, (Primary Care Clinical Lead)
- Jess Long, Project Director, Collaborative Clinical Pathways, Health Care Development, MidCentral DHB (Facilitator)
- Liz Elliott, Clinical Advisor Health of Older People, Health Care Development, MidCentral DHB (Editor)
- Mary Meendering, Clinical Nurse Specialist, Gynaecology, MidCentral Health
- Janice Harrington, Nurse Practitioner Primary Health Care Across the Lifespan, Kauri HealthCare
- Kate Morton, Nurse Practitioner Primary Health Care Across the Lifespan, Central City Medical

Disclaimers

Clinical Board Central PHO, MidCentral DHB

It is not the function of the Clinical Board Central PHO, MidCentral DHB to substitute for the role of the clinician, but to support the clinician in enabling access to know-how and knowledge. Users of the Map of Medicine are therefore urged to use their own professional judgement to ensure that the patient receives the best possible care. Whilst reasonable efforts have been made to ensure the accuracy of the information on this online clinical knowledge resource, we cannot guarantee its correctness and completeness. The information on the Map of Medicine is subject to change and we cannot guarantee that it is up-to-date.