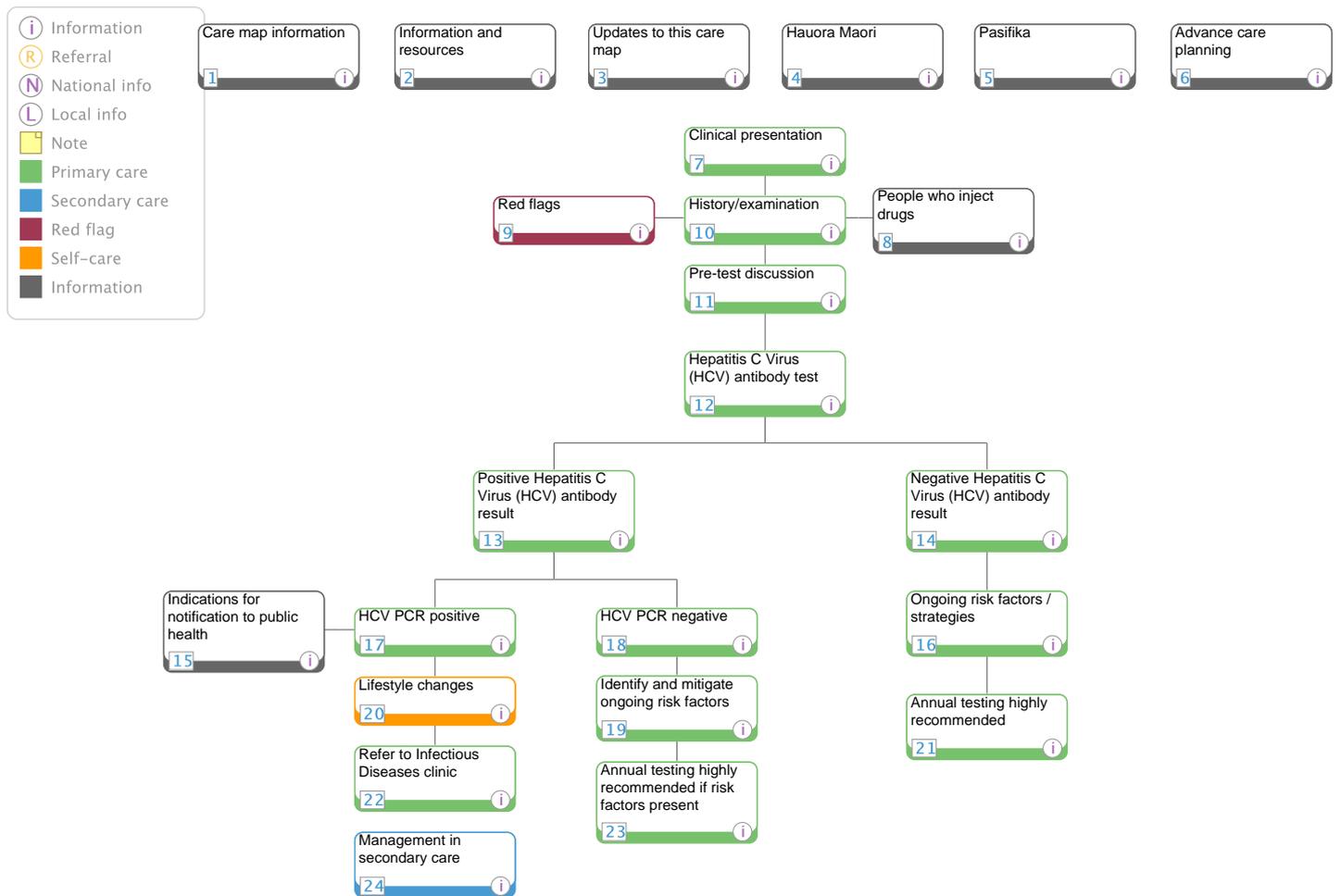


Hepatitis C - Suspected

Medicine > Hepatology > Hepatitis C



Hepatitis C - Suspected

Medicine > Hepatology > Hepatitis C

1 Care map information

Quick info:

Scope:

- diagnosis of Hepatitis C Virus (HCV) in primary care and other community settings
- management and treatment of HCV

Out of scope:

- the diagnosis of HCV in children

Prevalence:

In New Zealand, there are approximately 20,000 people who have been diagnosed with chronic HCV. There are thought to be a further 30,000 people who have chronic hepatitis C who aren't yet diagnosed with the disease [1]. Current data also suggests that Maori are over represented in the population of people living with chronic HCV. Data supplied by the Hepatitis Foundation of NZ shows that approximately 1:4 people diagnosed with HCV are Maori.

Background:

Chronic HCV is a disease which is caused by a virus. There are different types of virus, known as genotypes. Six different Hepatitis C genotypes have been identified. The virus causes inflammation in the liver. Over time, usually several years, this inflammation can result in scarring of the liver, known as fibrosis. As fibrosis develops, liver cirrhosis may develop which means the liver stops working properly. The damage inflicted on the liver as a result of the virus can lead to serious health outcomes such as liver failure, liver cancer and potentially death.

HCV:

- transmitted by blood and percutaneous transfer - the most common way of infection is current / past intravenous drug use
- sexual transmission (almost always men having sex with men) and perinatal transmission are possible but very uncommon
- in the acute infection, most people are asymptomatic however about 80% will become chronically infected
- chronic HCV infection causes liver damage in 20% of cases, this can progress to cirrhosis and hepatic failure. Hepatocellular cancer risk increases through these stages
- the damage from chronic HCV is slowly progressive (about 30 years) but excess alcohol intake and co-infection (especially with Hepatitis B and/or HIV) speeds this up

References

[1] Gane et al. Impact of improved treatment on disease burden of chronic hepatitis C in New Zealand NZMJ; 2014; 127:1407: 61-74. Available from [NZMJ](#)

2 Information and resources

Quick info:

Information for patients

Patient support information:

- [What is Hepatitis C](#)
- [Understanding Hepatitis C](#)
- [Hepatitis resources](#)
- [Understanding testing for Hepatitis C](#)
- [Understanding the Fibroscan](#)
- [Looking after yourself with Hepatitis](#)
- [Cirrhosis and chronic hepatitis](#)

[For the above resources in other languages](#)

Fibroscans:

- a Fibroscan provides information about the health of your liver
- is a simple, painless tool that determines if liver damage (fibrosis or cirrhosis) is present
- measures the degree of stiffness of the liver
- [an in-depth look at the Fibroscan](#)

Liver biopsy:

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- a liver biopsy is a procedure which involves taking a small sample of liver tissue and examining it with a microscope
- in many cases, a Fibroscan removes the need for a liver biopsy

Information for providers

Funded treatments:

- [Pharmac - Hepatitis C](#) (information on new treatments including product information, medical information for prescribers and pharmacists, and details about patient eligibility)
- [HEP Drug Interaction Checker](#) (free App administered by University of Liverpool)

BPAC:

- [liver function testing in primary care](#)
- [best tests July 2009 - Hepatitis](#)

Education:

- [BMJ learning](#) (requires registration) - Hepatitis C infection: diagnosis and treatment
- [LearnOnline \(MOH\)](#) - Hepatitis C Learning Programme (training and education on the new Hepatitis C treatments)

Other:

- [Ministry of Health - Improving Hepatitis treatment services in New Zealand](#)
- [Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine \(ASHM\)](#)
- [Communicable disease Manual](#)
- [Communicable disease control manual](#)

Language translation assistance

HBDHB Interpreting Service. To make an appointment (charges may apply):

- phone 06 878 8109 ext. 5805 or
- email interpreting@hawkesbaydhb.govt.nz

These websites may help with simple words and phrases:

- [Babelfish](#)
- [Google translate](#)

[Language Line](#) Professional interpreters are available, free of charge, for telephone-based sessions (44 languages are supported):

- Phone 0800 656 656
- Monday - Friday 9am - 6pm
- Saturday 9am - 2pm

Bookings are not usually necessary. For longer consultations (for example, a nurse consultation for a newly diagnosed person) it is best to make a booking at least 24 hours in advance by calling the above number or emailing language.line@dia.govt.nz and providing your contact details and a summary of the service you require (time and date of the meeting, language, approximate length of the appointment, gender of interpreter (if relevant)).

3 Updates to this care map

Quick info:

Date of publication: April 2017

Review date: April 2018

This care map has been developed in line with consideration to evidenced based guidelines. For further information on contributors and references please see the Pathway's Provenance Certificate.

NB: This information appears on each page of this care map.

4 Hauora Maori

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Quick info:

Data supplied by the Hepatitis Foundation of NZ shows that approximately 1 in 4 people diagnosed with Hepatitis C (HCV) are Maori.

Maori are a diverse people and whilst there is no single Maori identity, it is vital practitioners offer culturally appropriate care when working with Maori whanau. It is important for practitioners to have a baseline understanding of the issues surrounding Maori health. This knowledge can be actualised by (not in any order of priority):

- considering the importance of introductions ('whanaungatanga') - a process that enables the exchange of information to support interaction and meaningful connections between individuals and groups. This means taking a little time to ask where this person is from or to where they have significant connections
- asking Maori people if they would like their whanau or significant others to be involved in assessment and treatment
- asking Maori people about any particular cultural beliefs they or their whanau have that might impact on assessment and treatment of the particular health issues

Maori health services

HBDHB contracts Maori health providers to deliver community based nursing and social support services. A referral to one of these providers may assist Maori people to feel more comfortable about receiving these services.

Central Hawke's Bay:

[Central Health](#)

Cnr Herbert & Ruataniwha Streets, Waipukurau

Phone: 06 858 9559 Fax: 06 858 9229

Email: reception@centralhealth.co.nz

[Referral Form](#)

Hastings:

[Te Taiwhenua o Heretaunga](#)

821 Orchard Road, Hastings 4156

Phone: 06 871 5350 Fax: 06 871 535

Email: taiwhenua.heretaunga@ttoh.iwi.nz

[Referral Form](#)

Kahungunu Health Services (Choices)

500 Maraekakaho Road, Hastings

Phone: 06 878 7616

Email: kahungunu@paradise.net.nz

[Referral Form](#)

Napier:

[Te Kupenga Hauora](#)

5 Sale Street, Napier

Phone: 06 835 1840

Email: info@tkh.org.nz

[Referral Form](#)

Wairoa:

Kahungunu Executive (no website)

65 Queen Street, Wairoa 4108

Phone: 06 838 6835 Fax: 06 838 7290

Email: kahu-exec@xtra.co.nz

Secondary care Maori Health Services:

Hawke's Bay DHB - Te Wahanga Hauora Maori Health Services

Phone: 06 878 8109 ext. 5779, 06 878 1654 or 0800 333 671 Email: admin.maorihealth@hawkesbaydhb.govt.nz

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Further Information

Practitioners should be versed in the knowledge of:

- historical overview of legislation that impacted on Maori well-being
- Maori models of health, such as [Te Whare Tapa Wha](#) and Te Wheke when working with Maori whanau
- national Maori Health Strategies:
 - **Mai Maori Health Strategy 2014-2019** - [Full file](#) or [Summary diagram](#)
 - **He Korowai Oranga**: Maori Health Strategy - sets the [Government's overarching framework](#) to achieving the best health outcomes for Maori
- local [Hawke's Bay health sector's strategies and initiatives](#) for improving Maori health and wellbeing

Cultural Competency Training

Training is available through the Hawke's Bay DHB to assist you to better understand Maori culture and to better engage with Maori people. Contact the coordinator

Email: education@hbdhb.govt.nz to request details of the next courses.

5 Pasifika

Quick info:

Pacific people value their culture, language, families, education and their health and wellbeing. Many Pacific families have a religious affiliation to a local church group.

The Pacific people are 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 in order to help you work with Pacific people more effectively
- for many families language, cost and access to care are barriers

Pacific ethnic groups in Hawke's Bay include Samoa, Cook Islands, Fiji, Tonga, Niue, Tokelau, Kiribati and Tuvalu. Samoan and Cook Island groups are the largest and make up two thirds of the total Pacific population. There is a growing trend of inter-ethnic relationships and New Zealand born Pacific populations.

Acknowledge [The FonaFale Model](#) (Pacific model of health) when working with Pacific people and families.

General guidelines when working with Pacific people and families (information developed by Central PHO, Manawatu):

- [Cultural protocols and greetings](#)
- [Building relationships](#) with your Pacific people
- [Involving family support and religion](#) during assessments and in the hospital
- [Home visits](#)

Hawke's Bay-based resources:

- [HBDHB interpreting service website](#) or phone 06 8788 109 ext.. 5805 (no charge for the hospital; charges may apply for community-based translations) or contact coordinator at interpreting@hbdhb.govt.nz
- Pacific Navigation Services Ltd Phone: 027 971 9199
- services to assist Pacific people to access healthcare ([SIA](#))
- [Improving the Health of Pacific People in Hawke's Bay](#) - Pacific Health action Plan

Ministry of Health resources:

- [Ala Mo'ui](#) Pathways to Pacific Health and wellbeing 2014-2018
- [Primary Care for Pacific people](#): a Pacific and health systems approach
- Health education resources in [Pacific languages](#) (links to a web page where you can download resources)

6 Advance care planning

Quick info:

Advance Care Planning:

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Advance Care Planning is a voluntary process of discussion and shared planning for future health care. It involves the person who is preparing the plan, and usually involves family/whanau and health care professionals.

Advance Care Plan:

An Advance Care Plan is the outcome of Advance Care Planning. It is formulated by the person and sets out their views about care towards the end of their life. It may also include views about medical care and a wide range of other matters. An Advance Care Plan may include an Advance Directive.

Advance Directive:

An Advance Directive is a statement a person makes about their medical care in the future and becomes effective if a person ceases to be competent to make decisions for themselves. An Advance Directive is legally binding if made in appropriate circumstances.

Competency and Advance Care Planning:

Competent people have the right to make autonomous decisions that as medical professionals we may regard as imprudent, and sometimes such decisions are a reflection of the person's longstanding personality, beliefs or lifestyle. This right is described in the Health and Disability Consumers Rights Acts.

According to ACP - A Guide for the NZ Health Care Workforce - "in the context of ACP, competency relates to an individual's ability to make a decision regarding their own health care (that is, competence at decision-making or decision-capacity). At a minimum, decision making capacity requires the ability to understand and communicate, to reason and deliberate, and the possession of a set of values".

Helpful websites:

- [The code of rights](#)
- [Advance care planning guide Ministry of Health](#)
- [Advance care planning resources](#)

7 Clinical presentation

Quick info:

Hepatitis C infection is:

- often asymptomatic for many years
- often undiagnosed until years later when symptoms appear

Acute hepatitis C infection:

- usually minimally symptomatic
- may produce jaundice

Chronic hepatitis C infection is often identified by:

- screening people at high risk
- investigation of abnormal liver function tests (LFTs)

References

- [2] Public Health England (PHE). Hepatitis C in the UK: 2013 report. London: PHE; 2013.
- [3] National Health Service (NHS). Hepatitis C: quick reference guide for primary care. London: NHS; 2011
- [4] British Association of Sexual Health and HIV (BASHH). United Kingdom national guideline on the management of the viral hepatitis A, B and C 2008. London: BASHH; 2008
- [5] Scottish Intercollegiate Guidelines Network (SIGN). Management of hepatitis C. SIGN publication no 133. Edinburgh: SIGN; 2013
- [6] Clinical Knowledge Summaries (CKS). Hepatitis C. November 2012. Newcastle upon Tyne: CKS; 2012

8 People who inject drugs

Quick info:

The new pharmaceuticals are an opportunity for injecting drug users to be treated and to be reintroduced into general practice for ongoing care.

People who inject drugs (PWID) – includes a wide variety of injecting drug use in New Zealand including opioids, methamphetamine and steroids (gym users).

Quick info [8]:

- some people with HCV may have only ever injected once i.e. back in the 1980's

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- others range from injecting daily to once a year:
 - veins are very important to people who inject drugs
 - a high number of people who inject drugs have a distrust of the health system (due to stigma and fear stemming from illegality)
 - injecting drug users come from all walks of life and generally keep this part of their life hidden
- people who inject drugs may or may not be enrolled in general practice, or be happy to discuss this issue with their GP
- poverty, homelessness and hunger may be an issue
- stigma and discrimination from health professionals (perceived or actual)
- equitable access to HCV treatment and as well as basic health care needs to be carefully managed if there is a distrust of the health system
- legal environment and criminalization of drug use creates stigma
- social and economic inclusion and re-integration
- psychological support may be required
- certain groups of people e.g. steroid users may not even consider that they are at risk of HCV

References

[8] Midland Region Hepatitis C Collaborative Clinical Pathway

9 Red flags

Quick info:

Suspect decompensated liver disease with any of the following:

- ascites
- jaundice
- encephalopathy
- suspected hepatocellular carcinoma

These people should be referred immediately to secondary care.

10 History/examination

Quick info:

Consider HCV when there is unexplained elevation of ALT / AST / LFTs.

Consider Hepatitis C (HCV) in at-risk populations:

- known HIV infection
- known Hepatitis B virus
- drug mis-use:
 - intravenous (IV) [3]
 - anabolic steroids [3]
 - current or past use, even if only once
- history of incarceration
- recipient of blood or tissue products before 1992
- mother with HCV [3,5]
- procedures in countries where infection control may be poor including:
 - tattoos, piercing, acupuncture or electrolysis
- accidental [3] or occupational exposure to blood products e.g. needlestick injuries, cuts, cleaning up blood, dealing with violent incidents where blood is involved [5]
- close contact with a HCV positive person which would put the patient at risk of transmission through blood or body fluids, including [7] sexual contact [3,5]
- travel in [6] or birth/migration from countries with an intermediate or high prevalence of HCV (2% or more)

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References

- [3] National Health Service (NHS). Hepatitis C: quick reference guide for primary care. London: NHS; 2011
- [5] Scottish Intercollegiate Guidelines Network (SIGN). Management of hepatitis C. SIGN publication no 133. Edinburgh: SIGN; 2013
- [7] National Institute for Health and Clinical Excellence (NICE). Hepatitis B and C: ways to promote and offer testing to people at increased risk of infection. Manchester: NICE; 2013
- [6] Clinical Knowledge Summaries (CKS). Hepatitis C. November 2012. Newcastle upon Tyne: CKS; 2012.

11 Pre-test discussion

Quick info:

Pre-test discussion to include:

- discussing HCV:
 - its natural history
- what the test involves
- explain that they will need to undergo further testing if the first test is positive
- consider the implications of a positive result for the individual and his/her family or close contacts
- benefits of treatment:
 - cure possible in majority of patients

12 Hepatitis C Virus (HCV) antibody test

Quick info:

The primary screening test for Hepatitis C Virus (HCV) is to test for antibodies to HCV:

- HCV antibody indicates exposure to HCV and not the current infection status

The HCV antibody remains positive long term, irrespective of persistence or clearance of infection, so it is usually unnecessary to repeat.

13 Positive Hepatitis C Virus (HCV) antibody result

Quick info:

Request laboratory to do HCV Polymerase Chain Reaction (PCR or also termed viral load) **and** genotype to identify current infection if not completed in the last five years. Do not perform if has been completed within this time.

14 Negative Hepatitis C Virus (HCV) antibody result

Quick info:

If antibody HCV result is negative:

- consider repeat test in 3 months if there has been a recent (within the past 3 months) one off risk exposure

15 Indications for notification to public health

Quick info:

Indications for notification to Public Health:

1. Change in Hepatitis C antibody from negative to positive (where the last negative test was <12 months ago)
OR
2. Acute clinical illness consistent with Hepatitis C with:
 - positive Hepatitis C antibody or PCR (Polymerase Chain Reaction), AND
 - other causes of acute Hepatitis can be excluded

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To notify Public Health Services, complete [notifiable disease fax form](#).

16 Ongoing risk factors / strategies

Quick info:

If risk factors present, annual testing is highly recommended.

Relevant ongoing risk factors include:

- injecting drug use where any drug paraphernalia is shared (including spoons/tourniquets)
- tattoos and body piercing – in an unlicensed and/or unsterile parlour/environment
- imprisonment
- medical or dental treatments in countries where equipment may not have been adequately sterilised
- needle stick injury
- received medical treatment in high risk countries
- ongoing at-risk sexual behaviours
- household member with HCV

Information to avoid infection:

- [Needle Exchange Programme](#) -
 - consists of approximately 200 outlets around New Zealand that sell new needles and syringes to injecting drug users and provide support and information
- [Needle Exchange NZ](#) (Drugs and Health Development Project):
 - referral and advice to minimise harm for people who inject drugs (accepts self-referral or other)
 - free service requiring return of used equipment
 - [contact information](#)

17 HCV PCR positive

Quick info:

If HCV Polymerase Chain Reaction (PCR) result is positive:

- this confirms the Hepatitis C Virus (HCV) diagnosis
- use the READ code 2J1.00 to record the classification / diagnosis of HCV in your patient management system
- consider testing for other blood borne viruses

18 HCV PCR negative

Quick info:

If HCV Polymerase Chain Reaction (PCR) result is negative:

- AND if last exposure to Hepatitis C Virus (HCV) was more than 3 months ago, these assumptions can be made:
 - HCV viral load negative outside the window period for testing:
 - patient has completely cleared the virus and there is no risk of reactivation
 - there is no risk of infection to others or of developing HCV
 - does not constitute immunity to HCV - patient can catch HCV again
 - patient can be organ donor but excluded from being a blood donor

19 Identify and mitigate ongoing risk factors

Quick info:

Relevant ongoing risk factors include:

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- injecting drug use where any drug paraphernalia is shared (including spoons/tourniquets)
- tattoos and body piercing – in an unlicensed and/or unsterile parlour/environment
- imprisonment
- medical or dental treatments in countries where equipment may not have been adequately sterilised
- needle stick injury
- received medical treatment in high risk countries
- ongoing at-risk sexual behaviours
- household member with HCV

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 - referral and advice to minimise harm for people who inject drugs (accepts self-referral or other)
 - free service requiring return of used equipment
 - [contact information](#)

20 Lifestyle changes

Quick info:

Lifestyle changes:

- stop alcohol consumption:
 - alcohol is strongly associated with a more rapid progression of liver disease
- stop smoking:
 - smoking can increase disease progression
- maintain healthy body weight:
 - obesity increases risk of non-alcoholic fatty liver disease and progression of cirrhosis
 - find time for exercise
 - avoid hepatotoxic medications and herbal preparations
- address misuse of other substances, e.g.:
 - illicit drugs
 - prescription drugs
 - for injecting drug users, provide advice on how they can prevent transmission

Advise on ways to avoid infecting others:

- avoid activities which could result in exposure of others to their infected blood:
 - sharing razors, toothbrushes, or any item that can scratch the skin
 - although the risk of sexual transmission is very low, the safest approach is to use barrier protection
- strongly encourage the person to inform contacts (injecting or sexual) so they can be tested
- do not:
 - donate blood or sperm
 - carry an organ donor card

21 Annual testing highly recommended

Quick info:

If there is continuing risk exposure there is a need for annual testing.

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22 Refer to Infectious Diseases clinic

Quick info:

Refer to Infectious Diseases clinic at Hawke's Bay Hospital via e.referral if available.

Include:

- genotype result
- LFTs
- INR
- FBC
- HIV & Hepatitis B serology
- check contact details are up to date

If you have a special interest and would like to treat the patient long-term after first specialist assessment (FSA), please indicate this on your referral.

23 Annual testing highly recommended if risk factors present

Quick info:

If there is continuing risk exposure, there is a need for annual testing.

24 Management in secondary care

Quick info:

If the GP has a special interest and would like to treat the patient long-term after first specialist assessment (FSA), this can be supported by secondary care.

Hepatitis C Provenance Certificate

Overview

This document describes the provenance of Hawke's Bay District Health Board's **Hepatitis C - Suspected** Pathway. It was localised for Hawke's Bay in September 2016 -March 2017 and first published in April 2017. A review of the Pathway is due in April 2018.

The Collaborative Clinical Pathways programme is one initiative stemming from the *Transform and Sustain* agenda. The main aims of CCP are to:

- Identify opportunities to improve how health and disability care is planned and delivered within the district to improve patient access to a wider range of health services that are both closer to home and reduce avoidable hospital admissions.
- Provide health professionals throughout the Hawke's Bay district with best practice, evidence-based clinical pathways that are available at the point of care.

Outcomes we expect to achieve include faster access to definitive care, improved health equity and outcomes, better value from publically-funded resources, and better patient experience through clear expectations, improved access and greater health literacy. These outcomes are clearly aligned to the NZ healthcare *Triple Aim* and *Better, Sooner, More Convenient* policy directions.

Editorial methodology

This Pathway 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 was developed by individuals with front-line clinical experience (see Contributors section of this document) and has undergone consultation to gain feedback and input from the wider clinical community.

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.

An update to this Pathway is scheduled for 12 months after first publication. However, feedback is welcomed at any time, with important updates added at the earliest opportunity within the Map of Medicine publishing schedule (the third Friday of each month).

References

This Pathway has been developed according to the Map of Medicine editorial methodology. Its content is based on high-quality guidelines and practice-based knowledge provided by contributors with front-line clinical experience. Feedback on this Pathway was received from stakeholders during a consultation process.

1.	Gane et al. Impact of improved treatment on disease burden of chronic hepatitis C in New Zealand NZMJ; 2014; 127:1407: 61- 74. Available from NZMJ
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4.	British Association of Sexual Health and HIV (BASHH). United Kingdom national guideline on the management of the viral hepatitis A, B and C 2008. London: BASHH; 2008. Available from: http://www.bashh.org/documents/1927.pdf
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8.	Midland Region Hepatitis C Collaborative Clinical Pathway

Contributors

The following individuals contributed to the Hawke's Bay localisation of this care map:

- David Rodgers, General Practitioner, Tamatea Medical Centre (Primary Care Lead)
- Andrew Burns, SMO Physician, HBDHB (Secondary Care Lead)
- Di Vicary, Clinical Advisory Pharmacist, Health Hawke's Bay

Map editing and facilitation

- Leigh White, HBDHB (Facilitator)
- Louise Pattison, Health Hawke's Bay (Map of Medicine Editor)

The following individuals contributed to the Central Region care map from which the Hawke's Bay map was localised:

- Dr Nick Tindle, Medical Head, Gastroenterology, MidCentral DHB
- Dr Mohib Merchant, Consultant Internal Medicine, Whanganui Hospital
- Dr David Rodgers, GP, Tamatea Medical Centre
- Dr Andrew Burns, Infectious Disease Consultant, Hawkes Bay Hospital
- Dr Mark Peterson, GP, Taradale Medical
- Dr Dave Ayling, GP, YOSS
- Liz Elliott, Clinical Advisor Health of Older People, MidCentral DHB (Facilitator)
- Kim Vardon, Project Support Officer, Central PHO (Editor)
- Sarah Duncan, Project Manager, Compass Health

Disclaimers

Clinical Pathways Steering Group, Hawke's Bay DHB and Health Hawke's Bay – Te Oranga Hawke's Bay

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