

Increasing Access to Hepatitis C Treatment

Stocktake of Existing Services

May 2007 to May 2008

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Introduction

Early in December 2006, the Minister of Health announced the investment of \$5 million of additional funding a year to expand access to and uptake of hepatitis C treatment services and the establishment of an advisory group (HCTAG) to facilitate that process.

HCTAG met for the first time in April 2007 and a primary task was to develop a questionnaire to gather relevant information from the District Health Boards (DHBs). Clearly, it is not possible to move forward with regard to expanded access to and uptake of treatment services without establishing what is happening now and identifying gaps and bottlenecks in service delivery.

HCTAG appreciates the efforts of the personnel at the various DHBs who took the time from their busy schedules, to respond to the detailed and complex *Stocktake* questionnaire – and to review their responses later in the year.

Aside from data-gathering, the *Stocktake* process may have served some ancillary purposes including highlighting, to the DHBs, the increased emphasis on hepatitis C treatment services and helping them to identify gaps in their record keeping. Notably, many were unable to separate hepatitis C patients from other gastroenterology or outpatient cases.

Bay of Plenty provided the most interesting evolution in their approach to hepatitis C treatment. Their initial response to the *Stocktake* indicated limited, entirely hospital-based, services. By the end of the year, they were rapidly evolving a shared care treatment model and this document had to be entirely revised to reflect their new responses.

Other initiatives in shared care are getting underway in Auckland and Christchurch. The number of New Zealanders living with hepatitis C is conservatively estimated to be in excess of 35,000. The future public health costs are potentially enormous. Increasing access to treatment services now, by developing shared care arrangements with the primary sector, can allay this future health burden.

Participants and responses

In May 2007 the *Hepatitis C Treatment Stocktake* questionnaires were despatched to the District Health Boards (DHBs). As at 1 October 2007, 16 (out of a possible 21) responses had been received. That is a response rate of 76 per cent. At that point, the results were written up and summary reports despatched to the DHBs for review, revision and, in case of those that had not replied in the first instance, an opportunity to respond.

Twenty out of a possible 21 DHBs had replied before April 2008, at least in part. The final response was received in May 2008; 12 months after the questionnaires were first distributed.

Wairarapa initially provided a partial response indicating that hepatitis C treatment services, were about to recommence. Wairarapa is not, therefore, included in the analyses which follow because their hepatitis C-related services have been suspended temporarily. A further response from Wairarapa DHB was provided in December 2008, and although too late for inclusion in the final document has been added as an appendix. This response indicates that their new service:

Starts February 2009. Will be a nurse-led clinic one day per week with direct oversight from the Gastroenterologist. This clinic is a partnership approach between Wairarapa Hospital and Wairarapa Addiction Services who follow the bulk of Hep C patients in the Wairarapa.

The 20 fully participating DHBs are Auckland, Bay of Plenty, Canterbury, Capital & Coast, Counties Manukau, Hawkes Bay, Hutt Valley, Lakes, Mid-Central, Nelson-Marlborough, Northland, Otago, South Canterbury, Southland, Tairāwhiti, Taranaki, Waikato, Waitemata, West Coast and Whanganui. Bay of Plenty significantly revised their responses in December, presumably in light of changes in policy, personnel and practice. Their revised responses have now been incorporated into the results summary.

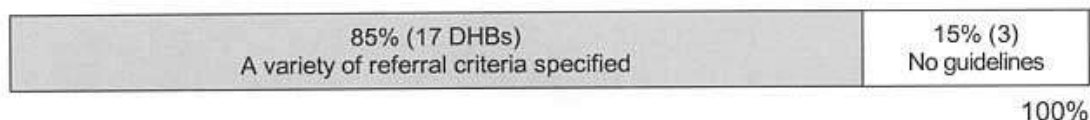
A complicating factor

Both Nelson and Wairau Hospitals completed separate questionnaires after our second request. Not all their responses concur – although they generally do in matters of policy. For example, Nelson has a speciality nurse-led clinic and Wairau does not, so initial new-patient assessments are conducted by the nurse at Nelson Hospital and the specialist at Wairau Hospital. Where possible, we have merged the data so that Nelson-Marlborough features only once in the analyses. Where that is not possible, the hospitals are specified.

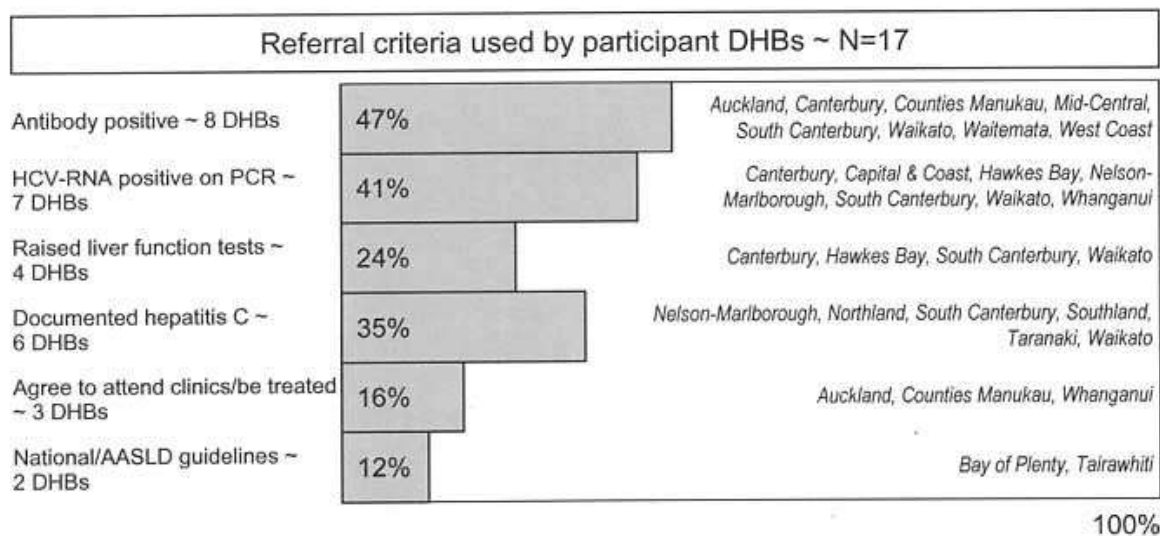
Referral

1. What are your guidelines for referral to secondary care for patients with hepatitis C?

Three DHBs [*Hutt Valley, Lakes, Otago*] indicated that they did not employ specific guidelines for referral and, it may be that these DHBs properly belong in the "Documented hepatitis C" category (see below) since referrals are unlikely to be made in the absence of some evidence of hepatitis C. However, in the absence of further information, they have been excluded from the final analysis.



The remaining DHBs nominated a number of criteria for referral and, in the interests of brevity, we have chosen to include "All patients with hepatitis C" and "Chronic hepatitis C" in the category, "Documented hepatitis C".



It is unclear whether DHBs that nominated multiple referral criteria only accept those patients who fit all the criteria. In the case of Waikato (four criteria) for example, a patient could fulfil the criteria for *documented hepatitis C* if they were either *antibody positive with raised liver function tests* or *HCV-RNA positive on PCR*.

All in all, there were nine combinations of criteria.

Criteria	f	%	DHBs (N=18)
Antibody positive (AB+)	3	17	Mid-Central, Waitemata, West Coast
AB+/agree to attend clinics/be treated	2	11	Auckland, Counties Manukau
AB+/ HCV-RNA positive (HCV-RNA+)/raised liver function tests (LFTS)	1	6	Canterbury
AB+/HCV-RNA+/raised LFTS/documentated hepatitis C	2	11	South Canterbury, Waikato
HCV-RNA+	2	11	Capital & Coast, Nelson
HCV-RNA+/raised LFTS	1	6	Hawkes Bay
HCV-RNA+/agree to attend clinics/be treated	1	6	Whanganui
Documentated hepatitis C	4	22	Northland, Southland, Taranaki, Wairau
National or AASLD guidelines	2	11	Bay of Plenty Tairāwhiti
	18	101	[Multiple rounding added 1 percent]

Comments

- *The organisation uses the AASLD guidelines.* [Bay of Plenty]
- *We also accept referral from other doctors and occasionally from other health care providers ... We take referrals from prison health services.* [Canterbury]
- *Any person who is RNA positive and would like further information or considering treatment.* [Nelson]
- *... as far as SDHB physicians are aware, any patient that is diagnosed in primary care with hep C is referred for evaluation.* [Southland]
- *MOPD accepts all referrals for review, regardless of acute vs chronic and LFT levels.* [Wairau]
- *I will see any patient the GP wishes me to assess ... should be hep C antibody positive!* [West Coast]

2. Do you add any information to seek prioritisation? [see Point 6]

<p>"No or not routinely" = 43% (9)</p> <p>Canterbury, Hutt Valley, Lakes, Nelson, Otago, Taranaki, Waitemata, West Coast, Whanganui</p>	<p>"Yes" = 57% (12)</p> <p>Auckland, BOP, Capital & Coast, Counties Manukau, Hawkes Bay, Mid-Central, Northland, South Canterbury, Southland, Tairāwhiti, Waikato, Wairau</p>
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100%

Note: Mid-Central actually stated "No or not routinely" in response to this question. They have been included in the "Yes" category because, in response to Question 1, they advised that those with evidence of advanced liver disease were seen more urgently.

The various grounds for prioritisation specified by the DHBs that replied in the affirmative were:

- duration of infection/time since exposure (acute)
- stage of disease (cirrhosis, decompensated cirrhosis or hepatocellular carcinoma, hepatoma, immunosuppression, extra-hepatic manifestations)
- clinical features of chronic liver disease (jaundice); suspicion of liver cancer
- patient's age
- at least two abnormal liver function tests.

3. What is on the referral form? Is there routinely provided an adequate history including recent LFTs, risk factors for HCV exposure, duration of infection, alcohol intake, how long clean from IDU, etc?

This question elicited a variety of responses with only two DHBs (Auckland and Bay of Plenty) clearly indicating the use of a referral form requesting specific categories of information including: history, risk factors, methadone use, alcohol use, recent LFTs, HBV immune status and social support.

Waitemata indicated that they collected specific information [*LFTs always, risk factors 50%, other information rarely*] but whether or not they use a hepatitis C referral form is unclear.

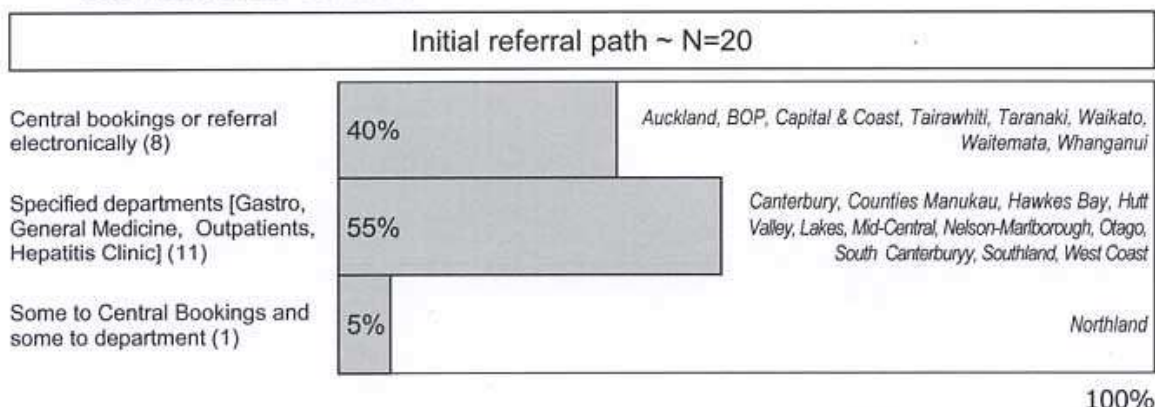
Responses from other DHBs varied from one extreme to the other, with one (Lakes) indicating that referral forms would not be useful because the vast majority of GP clinical summaries were perfectly adequate and one (Waikato) stating that GP letters were lacking and a form would be helpful.

On balance, the majority of participating DHBs were still reliant on referral letters from the GP with clinical summaries that some considered to be mostly adequate and others did not. Thus, there would appear to be a strong case for standardisation.

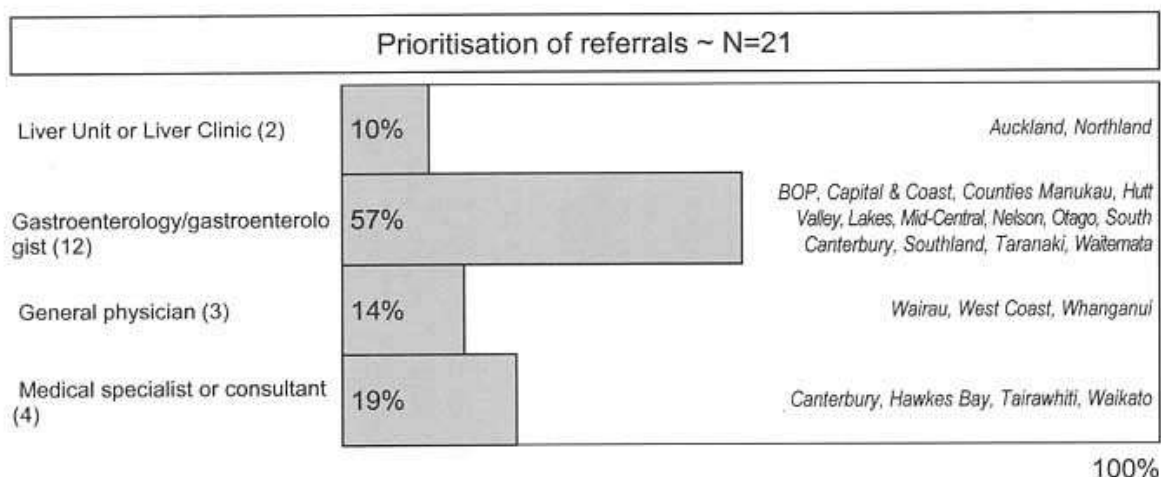
Pertinent comments

- *It would be helpful to have a standard referral form and this is something we should discuss with our GP colleagues.* [Canterbury]
- *We do not have a referral form for hep C ... I now have our GPs educated to check for hep C RNA before referring. Midwives remain a problem ...* [West Coast]
- *If inadequate details, referral is sent back to GP and further info is requested ...* [Mid-Central]

4. Where are the referrals sent from primary care (Central Bookings Office, specific departments or individuals)? Who is responsible for sorting these? Who prioritises referrals?



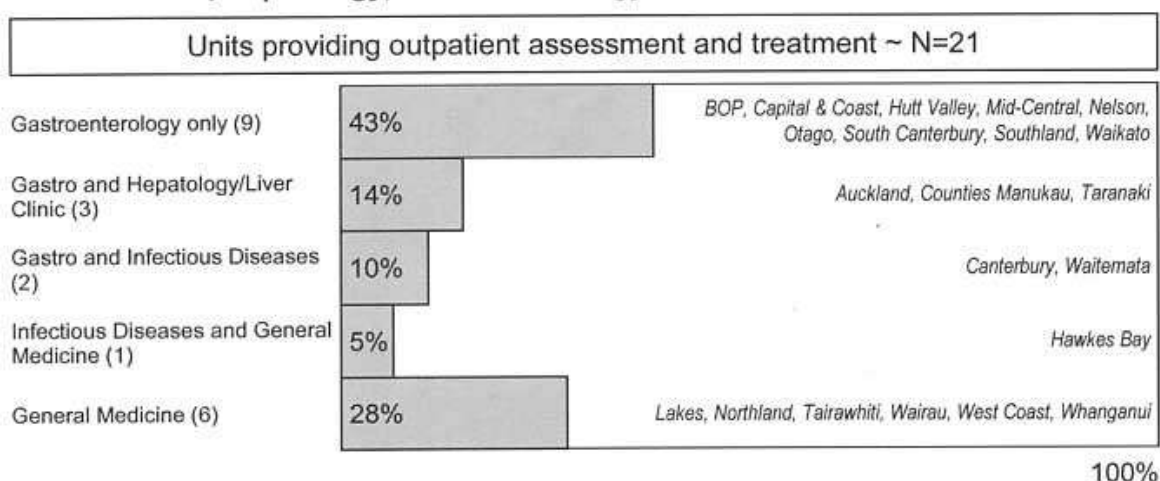
Note: Southland indicated that their referral process was under review and would be centralised in the near future.



Pertinent comments

- *Non-urgent referrals returned to GP.* [Waikato]
- *We still have some delays due to central referral system which prolongs process by several days.* [Waikato]

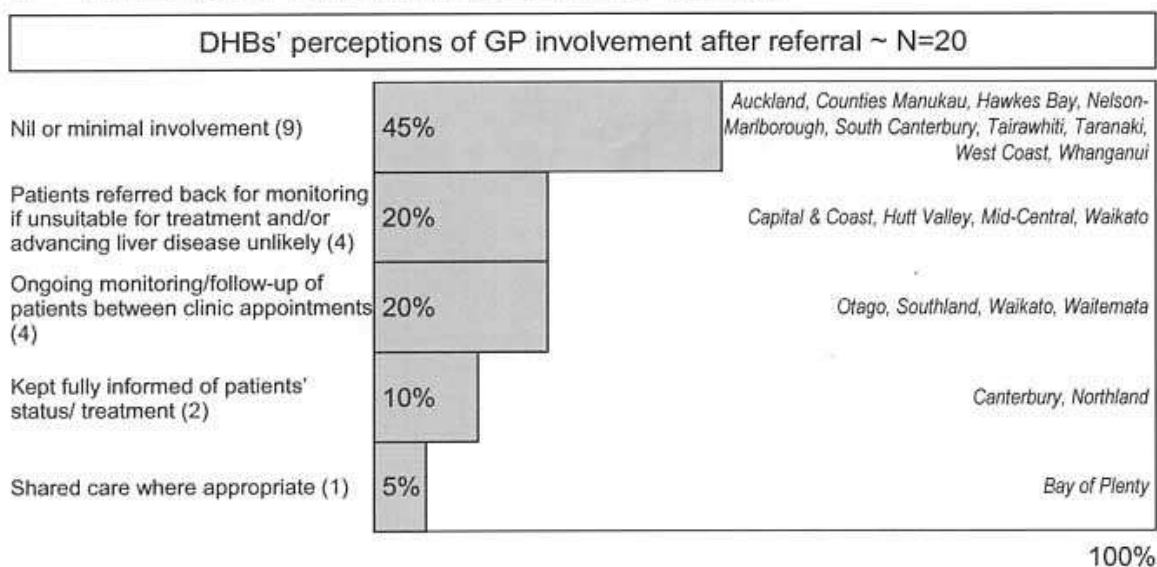
5. Which speciality units in your hospital will provide outpatient assessment and treatment for patients with hepatitis C: General Medicine, Infectious Diseases, Hepatology, Gastroenterology?



6. How are hepatitis C patients prioritised relative to other patients within the specialty and what are the factors used to prioritise hepatitis C patients (eg, acute hepatitis C, probably cirrhosis, hepatoma, immunosuppressed, etc)?

- Most DHBs, regardless of structural processes, prioritise according to severity of disease/symptoms, ie, acute hepatitis C, evidence of cirrhosis, hepatoma, immunosuppression, etc, are prioritised.
- Some go to a nurse-led clinic or dedicated hepatitis C clinic or specific priority streams for further assessment of urgency of referrals. Thus, they are looked at separately, not relative to other patients. There is a very short waiting time for these.
- Bay of Plenty appended detailed prioritisation criteria based on the AASLD guidelines.
- Others:
 - screen hepatitis C referrals prior to seeing them at clinic
 - prioritise hepatitis C referrals “C” (12–24 weeks) unless there are specific concerns
 - classify hepatitis C referrals as semi-urgent, unless decompensated liver disease is indicated
 - use general outpatient referral access guidelines
 - see patients with hepatitis C within three months unless there are specific concerns
 - assign a higher priority where the known period of infection is longer
 - West Coast commented that prioritisation was not an issue for them, which (we presume) indicates that all referrals are seen fairly quickly.

7. What is the GP’s role in the process after referral?



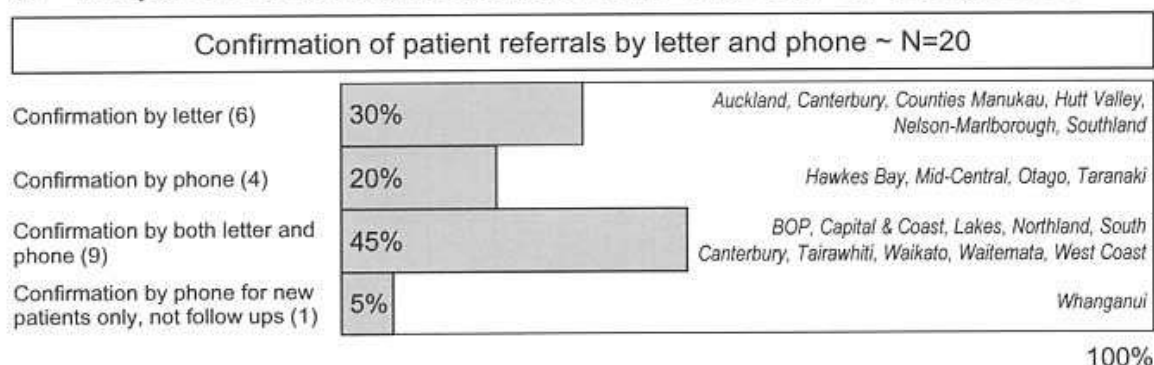
Pertinent comments

- *Depending on the type of patients, their role will be either monitoring or directly treating patients, with supervision and support from the specialists and hepatitis nurse.* [Bay of Plenty]
- *GP assistance in managing side effects of interferon (due to travel problems for patients).* [Mid-Central]

8. How many referrals are returned to the GP due to low priority? What determines such "low priority" status?

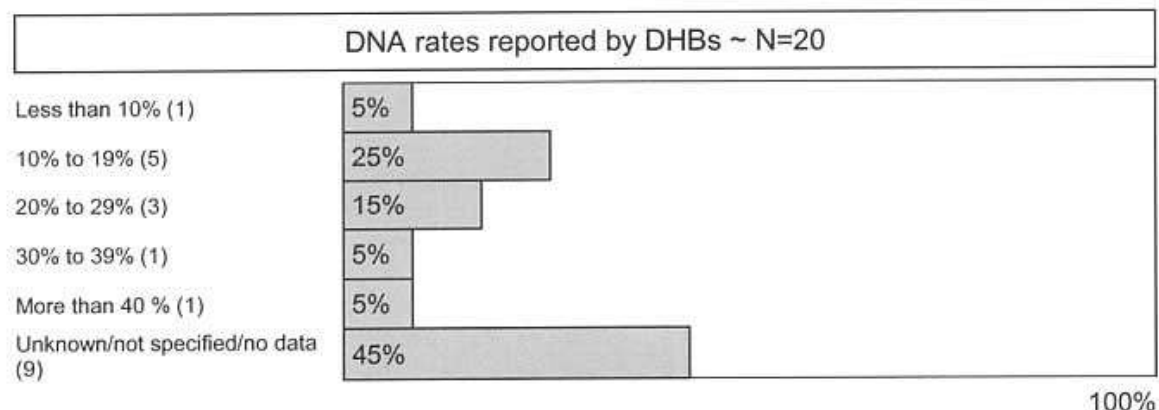
- Eighteen of the 20 participating DHBs (90%) stated that no hepatitis C-related referrals were returned to their GPs due to low priority.
- Waikato noted that about 10 per cent of hepatitis C-related referrals were returned to the GP either because their LFTs were low or normal or due to ongoing substance abuse and/or an active psychiatric condition.
- Bay of Plenty indicated that low priority status would be accorded to hepatitis C patients with normal liver enzymes, low viral load and/or obvious co-morbidities which would preclude treatment.
- Mid-Central stated that referrals have been deferred for six months decisions re funding hepatitis C are made by management.

9. Are patient referrals confirmed prior to the clinic day – by letter, phone?

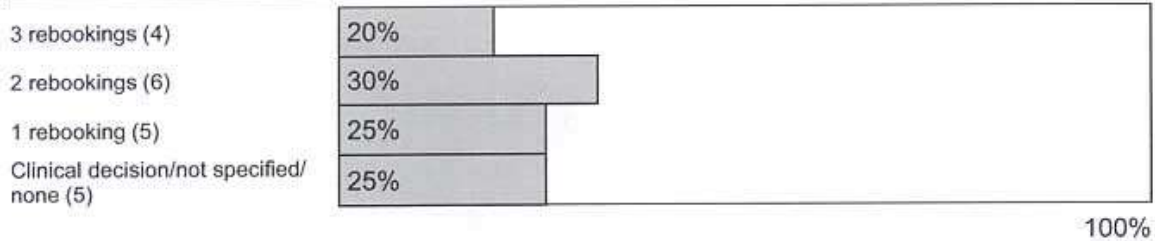


10. What is the non-attendance (DNA) rate and what is the process following a DNA? How many times will DNA patients be rebooked? If DNA patients are discharged, are they referred back to their GPs?

- Reported DNA rates ranged from 9 to 50 per cent.
- Some DHBs made the distinction between initial appointments and follow ups. It seems that DNA rates may be higher for follow ups.
- Almost half the participants failed to report numeric DNA rates, some noting that no data was kept for hepatitis C specifically.



Number of rebookings of DNAs reported by DHBs ~ N=20



Most DHBs have follow up procedures in place including ringing to see why the patient did not attend and checking back with the GP. Most offer reappointment.

Pertinent comments

- *Hepatitis Foundation also provides surveillance and follow-up.* [Bay of Plenty]
- *Letter to GP asking for re-referral. I need to be able to rely on these patients to attend for monitoring and take non-attendance at first appointment as a poor risk patient.* [West Coast]

11. If patients are not suitable candidates for treatment, refuse treatment or have undergone treatment but failed, are they discharged back to the GP?

<p>"No or not routinely" ~ 45% (9)</p> <p>Auckland, Canterbury, Counties Manukau, Hutt Valley, Lakes, Southland, Taranaki, Waitemata, West Coast</p>	<p>"Yes" ~ 55% (11)</p> <p>BOP, Capital & Coast, Hawkes Bay, Mid-Central, Nelson-Marlborough, Northland, Otago, South Canterbury, Tairāwhiti, Waikato, Whanganui</p>
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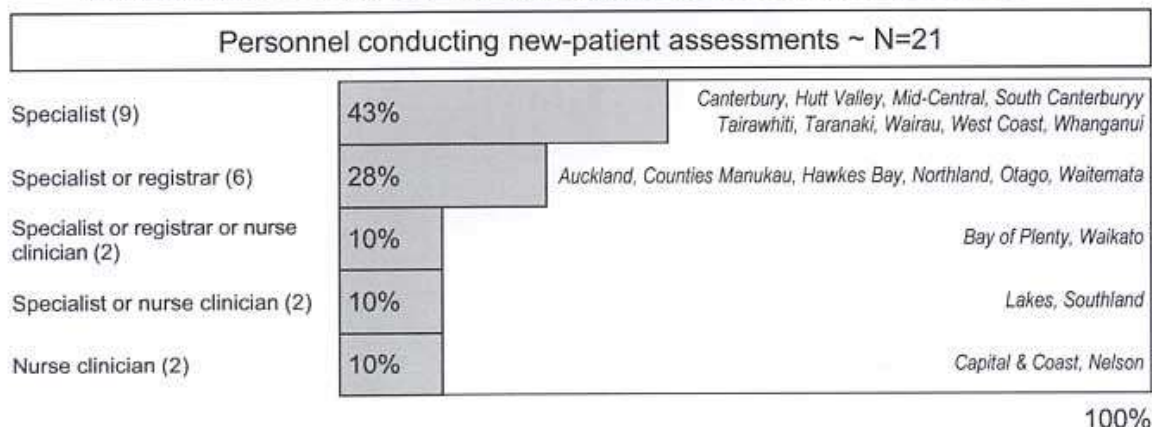
100%

Note: Taranaki indicated that cases were looked at on an individual basis so they have been included in the "No or not routinely" category.

Sixteen (80%) of the 20 DHBs indicated that patients with cirrhosis and/or other complicating factors were followed up on an annual or six-monthly basis, as circumstances warranted. Nelson-Marlborough, South Canterbury, Tairāwhiti and Taranaki did not add this qualification, but that does not necessarily mean that they do not follow up these patients.

Post-first assessment

12. Who conducts the initial new-patient assessment – specialist, registrar, house-surgeon or nurse? Is every clinic supervised by a specialist?



Most DHBs indicated that clinics were supervised by a specialist, although other personnel undertook patient consultations.

13. What tests are ordered at this initial assessment: LFTs, HCV-RNA, viral load, viral genotype, ultrasound, liver biopsy?

- All DHBs indicated that they would carry out the nominated tests, as appropriate. They would not do those tests for which recent results were available at the time of consultation and many would undertake liver biopsy only in a pre-treatment context. A number specified that they would only order viral load tests in a pre-treatment context.
- Otago and Whanganui listed a range of other tests including hepatitis A and B and HIV serology, coagulation studies, iron studies, screening for autoimmune antibodies, kidney function, thyroid function, etc. It was not clear whether the additional tests were ordered routinely in cases where recent results were not available, only in a treatment/pre-treatment context, or when there were appropriate clinical indicators.
- Nelson-Marlborough, listed a range of tests that were ordered routinely for patients starting treatment, if they had not recently been performed.

14. How is the severity of liver disease assessed in people with bleeding disorders prior to treatment – biopsy (transjugular vs percutaneous), ultrasound, scintigraphy, other?

- Most DHBs relied upon a combination of ultrasound scanning, bloods and clinical indicators, some with CT/MRI scanning as a back up and Northland also operated on the cautious presumption of cirrhosis.
- Auckland nominated nuclear medicine scintigraphy or ultrasound.
- Canterbury indicated that they hoped to purchase a fibroscanner in the next few months.
- Southland advised that they had not encountered the issue, so far, but would probably refer patients with bleeding disorders on to a tertiary service.

- Only Waikato noted that transjugular biopsy had been used and South Canterbury mentioned it as a possibility if really necessary.
- Mid-Central indicated the possible use of percutaneous biopsy in selected cases.

15. What is done to prepare patients for antiviral therapy: What various activities happen between new-patient specialist assessment and commencing treatment:

- ♦ Who sees the patient?
- ♦ Referral to a nurse-led clinic?

Tairāwhiti advised that patients were assessed by the specialist because there were no nurse-led clinics.

With the exception of Tairāwhiti, most responses from participating DHBs were similar and included some or all of the elements summarised below.

- Initial assessments and tests undertaken (the majority by gastroenterologist). Sometimes treatment is discussed at that time then the patient is referred to a nurse-led clinic. Other times, the treatment discussion is done by nurse specialist.
- A number mentioned the kits provided with the *Pegasys* product, including the educational DVD.
- Referral to liaison psychiatry, if appropriate.
- Regular blood tests, education, counselling prior to and during treatment, the majority by nurse specialist.

In addition:

- Refer to treatment guidelines [*AASLD*] (Bay of Plenty).
- Referrals to dietician, CADS (Otago).
- Detailed information provided including websites and local hepatitis C support group (Otago).
- Education re self-administration of medication (Whanganui).
- HAD assessment done as baseline (Whanganui).

16. Is a psychiatric assessment performed routinely on all patients prior to the decision on therapy? How is this done – subjective assessment? Objective score (eg, HADS score)? Formal liaison psychiatry review?

Psychiatric assessment routine ~ 60% (12) <i>Auckland, BOP, Canterbury, Hawkes Bay, Hutt Valley, Lakes, Mid-Central, Nelson, Northland, Taranaki, Waikato, Waitemata</i>	Assessment not routine ~ 40% (8) <i>Otago, South Canterbury, Southland, Tairāwhiti, Taranaki, Wairau, West Coast, Whanganui</i>
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100%

Note: N=19 because Capital & Coast has been excluded from the analysis above. They indicated that patients with a significant or recent history of psychiatric problems were referred to psychiatric liaison but it was unclear whether the decision to refer was based on the existing record or a fresh assessment.

- Psychiatric history (Auckland, Canterbury, Counties Manukau, Hawkes Bay Lakes, Mid-Central, Northland, Waitemata).
- Patients carefully screened during assessment process and referred as appropriate (Bay of Plenty).
- Psychiatric assessment done by gastro (Hutt Valley, Waikato).
- HAD test carried out routinely (Counties Manukau, Lakes, Northland, Waikato, Waitemata).
- Referral to Psychiatric Liaison Team as appropriate (Capital & Coast, Counties Manukau, Hutt Valley, Northland, Waikato, Waitemata).
- Do screening questions using DSM IV on all (Nelson).

- Assessment done where there is a previous psychiatric diagnosis (Tairāwhiti, Otago, Taranaki, Wairau).
- Psychiatric assessment not routinely performed (Otago, South Canterbury, Whanganui).

Pertinent comments

- *We have recently commenced a combined clinic with the psychiatrists who supervise the local methadone programme and this facilitates management of psychiatric problems.* [Lakes]
- *Currently everybody has a psychological assessment as part of a research study.* [Canterbury]
- *HADS scoring is planned for the future.* [Mid-Central]

17. Do patients receive information in preparation for treatment (re side effects, etc)? If so, what information and in what form? For example, clinic visits, written information, etc.

All participating DHBs mentioned the provision of verbal information/clinic visits, as well as written information. Other information sources mentioned were as follows:

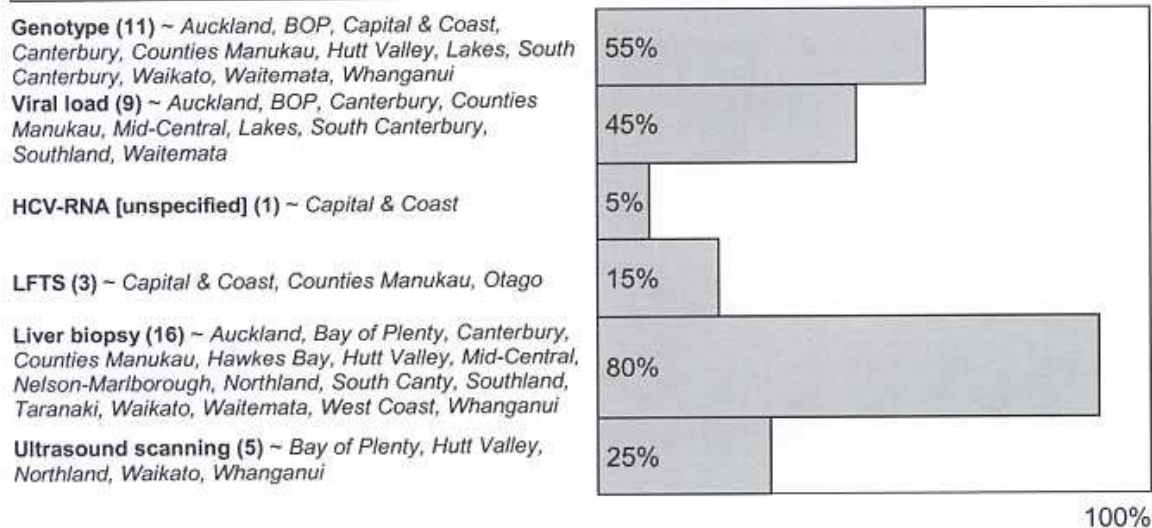
- written information from pharmaceutical company
- DVD/video/CD
- website addresses
- contact with local support group
- telephone question time
- drug data and treatment plan.

18. What testing do you do after first assessment? ie, genotype? viral load? biopsy?

Most DHBs advised that they carried out genotype and viral load testing, as well as biopsy, where appropriate. Several also mentioned ultrasound scanning and liver function tests. Other responses not included in the breakdown, below, are as follows:

- Thyroid function, CBC, INR (Bay of Plenty)
- Extensive blood tests (Capital & Coast)
- Coags, FBC, Alb (Counties Manukau, Otago)
- GGT (Otago) [*presumably additional to routine LFTs which usually include this test*]
- CBC (South Canterbury).

Tests performed after first assessment ~ N=20



Pertinent comments

- Genotype, viral load, not always a liver biopsy. [South Canterbury]
- Genotype is usually done prior to first assessment and biopsy is done after first assessment. Viral load, as previously mentioned, sample taken and held for 12 weeks. [Southland]
- Usually have genotype at referral (GP education worked!). [West Coast]

19. What are the exclusion criteria for treatment: alcohol abuse/length of abstinence; injecting drug use; length of abstinence; methadone; cannabis; other?

- Participating DHBs that addressed the issue, all denied that methadone use was an absolute ground for exclusion. The determining factors were whether or not the patient was stable on methadone and free of complicating psychiatric issues.
- DHBs that addressed the issue also indicated that cannabis use was not an absolute ground for exclusion. However, some noted the need for such use to be moderate and/or preferably reducing.
- Current alcohol abuse was deemed, by most respondents, to be an absolute ground for exclusion with required periods of abstinence ranging from discretionary to at least six months. Six months abstinence was generally preferred. However, Bay of Plenty specified one year, noting that even casual drinkers were admonished to discontinue alcohol consumption during treatment.
- Current injecting drug use was also deemed to be an absolute ground for exclusion. Required periods of abstinence were similar to those applying to alcohol abuse, with most DHBs specifying six months and Bay of Plenty specifying one year and involvement in an active treatment plan.

Other responses included:

- failure of compliance/inability to complete treatment course
- severe psychiatric illness
- uncontrolled epilepsy
- pregnancy/breast feeding
- inability to take contraception
- autoimmune diseases

- severe cardiac or respiratory diseases
- advanced age
- benzodiazepine dependence of concern
- negative PCR
- required to be drug free but not alcohol free (Hawkes Bay).

Treatment

20. Is there a standard treatment protocol for hepatitis C that you follow?

All 19 participating DHBS confirmed that they followed a standard treatment protocol. Some elaborated:

- *Latest APASL Guidelines for Management of HCV.* [Auckland]
- *Follow pharmaceutical companies' recommendations.* [Capital & Coast]
- *The manufacturers' guidelines are followed.* [Lakes]
- *Based on drug company recommendations and Pharmac guidelines and latest research.* [Nelson]
- *General treatment rules according to genotype but individualise treatment according to response and side-effects.* [Waikato]

21. In patients infected with HCV genotype 1 do you follow the "early stopping rule" for treatment, ie, if HCV-RNA level after 12 weeks has not dropped by more than two logs from baseline level, is treatment stopped?

Nineteen (95%) of the 20 participating DHBS confirmed that they followed the "early stopping rule".

Pertinent comments

- *Treatment would be stopped at 24 weeks if PCR positive.* [Lakes]
- *Both stopping rules – four-week (RVR) and 12-week (EVR).* [Auckland and Counties Manukau]
- *Yes and going to adopt the four-week RVR for genotypes 1 and 4.* [Nelson]
- *Yes unless cirrhotic when we will sometimes allow 24 weeks to gain control but this is unusual.* [Waikato]

22. In patients infected with HCV genotype 2 or 3, how many weeks treatment is administered?

Eighteen (90%) of the 20 participating DHBS said 24 weeks' treatment were administered. Whanganui indicated 26 weeks of treatment. Tairāwhiti said two weeks, which was probably a typo.

Pertinent comments

- *24 [...] except where immuno-compromised (eg, post-liver transplantation).* [Hutt Valley]
- *Six months unless cirrhotic, then 12 months.* [Canterbury]
- *Would like to see modifications using pre-treatment viral load and on treatment response to allow variation in treatment schedule.* [Waikato]

General statistics

23. What is the total number of first time specialist appointments for patients with hepatitis C at your hospital annually?

Auckland	353 ~ June 2006–June 2007	Otago	Data not collected for hep C
Bay of Plenty	Information not available	South Canterbury	Unable to extrapolate from data
Capital & Coast	>= 50 ~ 40 January–May 2007	Southland	Data not available
Canterbury	Approximately 150	Tairāwhiti	Not available from database
Counties Manukau	92 ~ estimate	Taranaki	?
Hawkes Bay	52	Waikato	?
Hutt Valley	Approximately 50	Wairau	8 ~ 2005/06
Lakes	22	Waitemata	100 ~ estimate
Mid-Central	6 ~ 2006–2007	West Coast	Approximately 15–20
Nelson	51 ~ 2005/06; 20 ~ January–May 2007	Whanganui	74
Northland	Approximately 100		

24a. How many patients with diagnosed hepatitis C were referred to your unit in 2005/2006?

Auckland	350	Otago	?
Bay of Plenty	Information not available	South Canterbury	6
Capital & Coast	50	Southland	?
Canterbury	Approximately 200 ~ 25–30% DNA	Tairāwhiti	?
Counties Manukau	?	Taranaki	?
Hawkes Bay	?	Waikato	75–100
Hutt Valley	50	Wairau	16
Lakes	35	Waitemata	100 ~ estimate
Mid-Central	6	West Coast	15–20
Nelson	Approximately 20	Whanganui	?
Northland	50–100		

24b. How many patients with diagnosed hepatitis C were referred to your unit in 2004/2005?

Auckland	300	Otago	?
Bay of Plenty	Information not available	South Canterbury	8
Capital & Coast	40	Southland	?
Canterbury	Approximately 200 ~ 25-30% DNA	Tairāwhiti	?
Counties Manukau	?	Taranaki	?
Hawkes Bay	?	Waikato	75-100
Hutt Valley	50	Wairau	9
Lakes	?	Waitemata	100 ~ estimate
Mid-Central	18	West Coast	15-20
Nelson	33	Whanganui	?
Northland	50-100		

25. What is the total number of patients [with hepatitis C] treated at your hospital annually?

Auckland	158 in 2006 ~ 40 on Peg trials	Otago	16-25
Bay of Plenty	Information not available	South Canterbury	6
Capital & Coast	30-40	Southland	?
Canterbury	?	Tairāwhiti	?
Counties Manukau	30-50	Taranaki	?
Hawkes Bay	27	Waikato	40-50
Hutt Valley	Approximately 25	Wairau	16
Lakes	10-14	Waitemata	55-75
Mid-Central	5-8	West Coast	10-15
Nelson	11-16	Whanganui	120-200
Northland	20		

26. How many patients are currently on treatment for hepatitis C at your hospital?

Auckland	88	Otago	17
Bay of Plenty	Approximately 10	South Canterbury	0
Capital & Coast	30–40	Southland	7
Canterbury	25	Tairāwhiti	Unknown
Counties Manukau	17	Taranaki	3
Hawkes Bay	12	Waikato	24
Hutt Valley	15	Wairau	7
Lakes	13	Waitemata	35
Mid-Central	8	West Coast	11
Nelson	11	Whanganui	14
Northland	15		

27. What is the total number of follow ups, including nurse and physician appointments seen at your hospital annually?

Auckland	2041	Otago	Nurse 195–230/physician unknown
Bay of Plenty	Total number unknown	South Canterbury	?
Capital & Coast	12–18 appointments per patient	Southland	?
Canterbury	Approximately 900–1200	Tairāwhiti	450
Counties Manukau	549	Taranaki	?
Hawkes Bay	58	Waikato	Approximately 170
Hutt Valley	Approximately 300	Wairau	20–30
Lakes	172	Waitemata	550 (nurse)
Mid-Central	75–99	West Coast	100–120 ~ estimate
Nelson	150–160	Whanganui	130–190
Northland	Physician approximately 150/nurse unknown		

28. How many patients with chronic hepatitis C were seen at your hospital between 1 January and 31 December 2006? Between 1 January and 31 December 2005?

The table below gives the total figures for the combined calendar years – 1 January 2005–31 December 2006.

Auckland	707	Otago	?
Bay of Plenty	Unknown (working on clinical database)	South Canterbury	?
Capital & Coast	100	Southland	?
Canterbury	Approximately 500	Tairāwhiti	?
Counties Manukau	?	Taranaki	?
Hawkes Bay	?	Waikato	Approximately 220
Hutt Valley	Approximately 150	Wairau	77
Lakes	22 new patients	Waitemata	150–200
Mid-Central	233	West Coast	30–40
Nelson	401	Whanganui	339
Northland	?		

Waiting times

- 29. If someone with hepatitis C is referred this week from their GP, what is the approximate waiting time for an initial specialist assessment at your hospital?**

Auckland	10–12 weeks	Otago	6 months
Bay of Plenty	1 month if prioritised for treatment	South Canterbury	3 months
Capital & Coast	3 months	Southland	3–4 weeks (for nurse specialist)
Canterbury	4–5 weeks	Tairāwhiti	< 3 months
Counties Manukau	10–12 weeks	Taranaki	3 months
Hawkes Bay	< 3 months	Waikato	4–6 weeks (< 2 weeks if urgent)
Hutt Valley	Average 3 weeks (1–8 weeks)	Wairau	# 6 months
Lakes	4–6 weeks	Waitemata	4–6 weeks
Mid-Central	6 months	West Coast	6–8 weeks Greymouth/# 4 months Westport
Nelson	2–4 weeks (nurse) + 4–8 weeks (spec)	Whanganui	15 weeks
Northland	2–3 months		

- 30. What was the total number of patients with hepatitis C waiting for initial assessment as at 1 July 2006?**

Auckland	< 50	Otago	?
Bay of Plenty	?	South Canterbury	?
Capital & Coast	?	Southland	?
Canterbury	?	Tairāwhiti	?
Counties Manukau	< 30	Taranaki	?
Hawkes Bay	?	Waikato	15 in June 2007
Hutt Valley	# 6	Wairau	10
Lakes	4	Waitemata	Probably none
Mid-Central	41	West Coast	4
Nelson	3	Whanganui	?
Northland	30		

31. How many new hepatitis C patients were added to the waiting list in the last six-month period?

Auckland	No waiting list	Otago	15
Bay of Plenty	?	South Canterbury	0
Capital & Coast	40	Southland	No waiting list
Canterbury	Approximately 100	Tairāwhiti	?
Counties Manukau	?	Taranaki	0
Hawkes Bay	?	Waikato	35
Hutt Valley	25	Wairau	2
Lakes	12	Waitemata	No waiting list
Mid-Central	24	West Coast	Approximately 10
Nelson	No waiting time	Whanganui	25
Northland	?		

32. What is the approximate time interval between receipt of initial referral from GP, to first time specialist appointment, to commencement of antiviral therapy?

Auckland	3–6 months	Otago	2–3 years
Bay of Plenty	1 month if adequate information	South Canterbury	6 months
Capital & Coast	6–12 months	Southland	13–16 weeks
Canterbury	Varies hugely, currently 1–2 months	Tairāwhiti	3 months
Counties Manukau	4–8 months	Taranaki	9 months
Hawkes Bay	4–6 months	Waikato	3–4 months
Hutt Valley	7–9 weeks	Wairau	# 6 months
Lakes	Minimum 6 weeks but can be longer	Waitemata	2–3 months
Mid-Central	7 months	West Coast	Approximately 6 months
Nelson	4–6 months	Whanganui	3–6 months
Northland	6–8 months		

33. What are the factors that contribute to waiting times?

- Waiting for liver biopsy
- Follow-up appointments with specialist
- Waiting for referral to nurse-led clinics
- Inadequate gastro FTE
- Specialist hep nurse led clinic FTE
- Screening tests
- Psychiatry assessment
- Patient's own preference or social issues
- Prison resources
- Patients having blood tests performed
- Wait for ultrasound scans
- Waits for first specialist appointments
- No funding to provide for hep C nurse
- GPs with specialist interest in hep C
- Lack of specialists
- Competition with other gastro service delivery
- Number of general medical outpatients to be seen
- Number of referrals
- Availability of doctors and nurses appointments
- Patient readiness to fully commit to treatment
- Pressure of other GM referrals with higher priorities
- Routine outpatients waitlists and special authority
- Workloads of specialists, nurses, GPs
- Management lack of support and lack of specific funding

Other

34. What limits capacity?

- Clinic time/clinical hours
- Clinic room/facility availability/clinic configuration
- FTE resource (nurse and specialist)/specialist resources
- No support service eg, dietician, psychiatrist, social worker formally attached to hep C clinic
- Demands of symptomatic patients with general medical and gastro problems
- Absence of administration support
- Registrar support for outpatient clinics
- Access to ultrasound and biopsies
- Access to nurse specialist support
- Difficulty obtaining funding for nurse led clinic
- Referral from GPs and A&D
- Hepatitis C (and hepatitis B) not seen as a priority
- Deferral of initial specialist assessment so that patients not able to be referred on to nurse-led clinics

Other comments

- *Capacity not significantly limited.* [Hutt Valley]
- *No problem with volumes.* [Wairau]

35. Do you have a dedicated hepatitis clinic?

<p>Dedicated hepatitis clinic ~ 67% (14) Auckland, Bay of Plenty, Capital & Coast, Canterbury, Hutt Valley, Lakes, Mid-Central, Nelson, Northland, Otago, Southland, Taranaki, Waikato, West Coast</p>	<p>No hepatitis clinic ~ 33% (7) Counties Manukau, South Canterbury, Hawkes Bay, Tairāwhiti, Taranaki, Wairau, Waitemata</p>
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100%

- Capital & Coast and Mid-Central advised that their dedicated hepatitis clinics were nurse-led.
- Lakes noted that 75% of their clinics were nurse-led with a combined nurse/specialist clinic fortnightly.
- Northland indicated that they scheduled hepatitis clinics at one session a week four weeks out of five.
- South Canterbury advised that a business case for dedicated nursing/clinic hours was being investigated.
- West Coast noted that Greymouth had a dedicated clinic but Buller did not.

36. How many FTE nurses and physicians are allocated to hepatitis C treatment at your hospital?

Auckland	0.8 nurse	Otago	0.5 nurse/0.6 physician (all gastro)
Bay of Plenty	0.6 nurse/specialists, part of gastro role	South Canterbury	Nil dedicated/0.4 nurse/gastro at OPD
Capital & Coast	Part of nurse clinician role	Southland	0.2 nurse/1 FTE physician
Canterbury	1/5 days nurse/four hours weekly physician	Tairāwhiti	0

Counties Manukau	0.8 nurse from June 2007	Taranaki	0.3 nurse/0.1 physician
Hawkes Bay	Part time nurse/part time physician	Waikato	1 nurse (covers HBV and transplant too)
Hutt Valley	0.1 nurse/0.1 physician	Wairau	3 physicians see hep C patients
Lakes	**0.5 gastro nurse/physician unclear	Waitemata	0.8 nurse spec/0.5 physician
Mid-Central	0.4 nurse (not protected) ~ physician unclear	West Coast	0.05 physician
Nelson	0.2 nurse/0.05 gastro	Whanganui	Nurse and physician 4 hours each weekly
Northland	0.5 nurse/< 0.1 physician		

Notes:

** Both nurse and physician hours appear to refer to the whole field of gastroenterology.

37. Do you have online access to GPs' laboratory results?

Yes 75% (15)	No 25% (5)
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100%

- Southland was anticipating access early in 2008 when the laboratory provider would have changed their computer system.
- Waikato qualified their affirmative by noting that they had on-line access to Medlab and Pathlab but were not necessarily informed about results unless they searched for them.
- West Coast noted that their access was theoretical because IT had not provided a password, but there were other ways ...
- Mid-Central also qualified their affirmative to exclude Paraparaumu where some GPs use a different laboratory.

38. Do you make your laboratory results available online to GPs?

Yes 50% (10)	Some 10% (2)	No 40% (8)
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100%

- Technology appeared to impose limits in the case of those DHBs that indicated results were available online to some GPs, or in some circumstances.
- Three of the DHBs who did not make results available online noted that they provided hard copies and two others noted that the online resource would be implemented this year/early next year.
- West Coast noted that HCV-RNA was not usually available to GPs online.
- Mid-Central has been included as a 'YES' despite the anomaly in Paraparaumu.

