



Hepatitis C

SERVICES REVIEW
March 2007



JUSTICE HEALTH
STATEWIDE SERVICE

NSW HEALTH

JUSTICE HEALTH
Long Bay Hospital
Anzac Parade
Malabar NSW 2036
PO Box 150
MATRAVILLE NSW 2036
Phone: + 61 2 9700 3000
Fax: + 61 2 9700 3493
www.justicehealth.nsw.gov.au

This document was prepared by Ms Debbie Pittam, Senior Project Officer Population Health in conjunction with Ms Shani Prosser, Acting Director Population Health, Mr Gary Forrest Acting Director Population Health and in consultation with Ms Jenny Douglas CNC Sexual Health and Hepatitis C.

Justice Health would like to thank members of the Justice Health Hepatitis Group and the state-wide Public Health Network for their contributions to this document.

© Justice Health 2007

Content within this publication was accurate at the time of publication.

Contents

Executive Summary	2	3.1.2	Management of Hepatitis C at Adult Centres that run Specialist Hepatitis Clinics	19
Overview of Current Hepatitis C Service Provision	2	3.1.2.1	Reported use of the Justice Health Hepatitis Clinical Management and Information Manual	19
Service Planning: A Two-tier Approach	3	3.1.2.2	Referral to Hepatitis Clinics	19
Summary of Recommendations	4	3.1.2.3	Access to Psychiatric and AOD Counselling for Patients Working Towards Commencing Treatment	19
1. Introduction and Background	7	3.1.2.4	Barriers to Commencing Treatment	20
1.1 Hepatitis C Services in Justice Health: A Review	7	3.1.2.5	Monitoring Patients on Treatment	20
1.2 Justice Health Profile	7	3.1.2.6	Nurses Comments on How to Improve Hepatitis C Services in Justice Health	21
1.2.1 Population Health Clinical Program	7	3.1.3	Teleconference with Public/Sexual Health Nurses who run Adult Specialist Hepatitis Clinics	21
1.2.2 Working with Department of Corrective Services and Department of Juvenile Justice to Achieve Health Outcomes	8	3.1.3.1	Role of Justice Health General Practitioners in Managing Patients with Hepatitis C	21
1.3 Adult Prison Population Profile	8	3.1.3.2	Telehealth	21
1.4 Young People in Custody Profile	9	3.1.3.3	Documentation Provided in the Hepatitis Clinical Management Guidelines and Information Manual	22
1.5 Hepatitis C and the Prison Population	9	3.1.3.4	Management of Patients Transferred to another Centre	22
1.6 Hepatitis C and the Risks in the Custodial Environment	9	3.1.3.5	Discharge Planning	22
1.7 The Impact of Hepatitis C on the Health of Patients	10	3.1.3.6	Nurses Ideas for Improving Specialist Hepatitis C Services	22
1.8 Research	10	3.1.4	Notes from the October 2004 Hepatitis Group Meeting with Visiting Medical Officers	22
2. Overview of Current Hepatitis C Service Provision	11	3.1.4.1	Medical Holds	23
2.1 Role of the Population Health Clinical Program in the Care of Hepatitis C Affected Adult Patients	11	3.1.4.2	Data Collection	23
2.2 Care and Management of Hepatitis C Affected Adolescent Patients	11	3.1.4.3	Treatment Interruption as a Result of Patient Movements	23
2.3 Public/Sexual Health Nurses Role within Justice Health	12	3.1.4.4	Nurse Led Clinics and Telehealth	23
2.3.1 Patient Satisfaction	13	3.1.4.5	Nurse Generated Referral to Community Based General Practitioners (with an interest in Hepatitis C)	23
2.4 Public/Sexual Health Nurses Professional Development	13	3.1.5	Discussions with Adolescent Health during the monthly Population Health Group meeting	23
2.5 Specialist Hepatitis Services	14	4. Budget	24	
2.6 Professional Development of Specialists	15	5. Long Term Health Service Planning	25	
2.7 Role of other Justice Health Clinical Programs in the Care of Hepatitis C Affected Patients	16	5.1	Proposed Directions in Future Model of Care Planning	25
2.7.1 Primary Health	16	Table 1:	Harm Minimisation and Screening for BBV and STI	27
2.7.2 Mental Health	16	Table 2:	Increase Capacity of Centralised Hepatitis Clinic LBH2	28
2.7.3 Alcohol and Other Drug Services	16	Table 3:	Maintain Local Justice Health Hepatitis Clinics that Work Well	29
3. Consultation	17	Table 4:	Patient Safety and Streamlining Clinical Care	30
3.1 Responses from Stakeholders	17	Table 5:	Specific Role of other Clinical Programs in Care of Patients Affected by Hepatitis C	31
3.1.1 Hepatitis C Management at Adult Centres Where There is No Visiting Specialist Medical Officer	17	Table 6:	Professional Development	32
3.1.1.1 Routine Management of Hepatitis C Positive Patients	17	References	33	
3.1.1.2 Management of Patients Who Are Transferred to the Centre on Hepatitis C Treatment	18			
3.1.1.3 Referral of Hepatitis C Positive Patients to Hepatitis Clinics	18			
3.1.1.4 Barriers Identified to the Referral of Patients to the Outpatient Hepatitis Clinic in Sydney (LBH2)	18			

Executive Summary

Responsibility for hepatitis C prevention and management within Justice Health has fallen primarily within the parameters of the clinical services of the Population Health stream, with services expanding gradually over the past 6 years. During this time the high prevalence of hepatitis C amongst NSW inmates and young people in custody has become widely known and harm minimisation has become a focus within Population Health. There has also been considerable investment by Population Health in the development of a specialised service and workforce to respond to Blood Borne Viruses (BBV) and Sexually Transmitted Infections (STI) generally and hepatitis C in particular. Treatment efficacy for hepatitis C has improved and the prescribing landscape is likely to change in the near future with significant implications for service delivery. The establishment of health services in Juvenile Justice Centres has also influenced the service planning requirements in Justice Health.

Within this context, it is timely to review existing services and plan the future directions for hepatitis C related clinical care within Justice Health.

Population Health has already undertaken a strategic planning and mapping process resulting in a strategic plan entitled *Hepatitis C the Challenges, the Response: Strategic Directions 2003-2006*. This strategic plan provides a broad overview of Hepatitis C services, contextualises service provision within Justice Health and describes broad strategic directions. The *Hepatitis C Services Review* is complementary to, and designed to be read in conjunction with, the strategic plan.

Population Health has identified that risk, equity and resources are significant issues relating to hepatitis C service provision within Justice Health. The purpose of this review is to describe in detail current hepatitis C services, identify gaps in services and comprehensively document recommendations that can be used to inform the development of an effective model of care for the future provision of services. Through this process, Population Health would like to brief the Executive and obtain their support to develop and implement an evidence based model of care that will result in further refining and developing services to inmates and young people in custody at risk of, or affected by, hepatitis C.

Overview of Current Hepatitis C Service Provision

Within Justice Health, the range of clinical hepatitis C services are managed by Population Health and provided primarily by Public/Sexual Health Nurses (PSHN). Each clinic, with the exception of Adolescent Health and the adult clinics run by sole clinicians has designated PSHN hours (the number of which varies depending on the size and population of each centre). In addition, specialist hepatitis medical services are provided by Visiting Medical Officer (VMO) Hepatitis C Specialists in collaboration with the PSHN both in Long Bay Hospital Area 2 (LBH2) and in a number of other metropolitan and some regional gaols.

PSHN are primarily funded and employed to provide Public and Sexual Health services within Justice Health. The main focus of these services is the implementation of two programs: the Targeted Screening Program (TSP) for Blood Borne Viruses and Sexually Transmitted Infections; and the Hepatitis B Vaccination Program. Skills and knowledge related to these areas are considered to be Core Skills for all PSHN and as such are a priority in terms of professional development for newly recruited PSHN (in relation to hepatitis C, these skills include risk assessment, pre and post test counselling/discussion and giving and managing positive results). After attainment of competency in the identified Core Skills for the specialty, PSHN gradually gain skills and knowledge in the additional specialty of hepatology, specifically related to chronic hepatitis C management.

The need to develop and maintain skills, knowledge and expertise in two quite different specialty areas in a geographically diverse setting, combined with staff attrition and subsequent recruitment of often, initially less experienced staff does result in some variability in the extent of hepatitis services provided between centres by the PSHN. Despite this however, over the past six years, the Public/Sexual Health nursing workforce has become highly skilled in blood-borne virus and sexual health service delivery in the custodial environment, and provides a comprehensive and targeted service. In addition, medical hepatitis services have expanded and PSHN have met this challenge, with many now

practicing at an advanced specialist level in hepatology in addition to Sexual Health. As a result of this evolution, hepatitis clinical care service delivery has become more sophisticated and expertise within the Population Health workforce generally has increased. Throughout this process, Population Health has addressed many gaps through planning and refining services within the confines of existing positions and existing funding.

Due to the increased sophistication of services and the high prevalence of hepatitis C however, demand has increased and the workforce can no longer respond to the overwhelming need. Hepatitis C management requires a whole of organisation response in order to meet this need, maintain patient safety and further develop an equitable service across Justice Health.

Service Planning: A Two-Tier Approach

In order for Justice Health to provide a comprehensive and equitable service for patients affected by hepatitis C, within the limited NSW Health designated funding for hepatitis services, a creative and flexible approach is required to meet the specific needs of each affected population. It is important for resources to be used across the entire continuum of care, from harm minimisation, risk assessment and screening through to ongoing monitoring and treatment. The range of complex life situations that affect Justice Health patients, their sentence lengths, recidivism and services available in the community, must all be taken into account in order to meet the range of patient needs described.

There is a need to address pressing service planning issues while at the same time, work towards a long term service plan. This service plan should meet patient needs in relation to the prevalence of hepatitis C as well as addressing the potential role of clinicians outside of Population Health in managing the service delivery. It is necessary to address service planning from two perspectives. Firstly, Population Health continues to work towards bridging gaps in services that can be managed within existing resources, including minor funding enhancements. To this end, a number of initiatives have either already been implemented during the process of this review, or are currently in progress.

Secondly, an organisation wide and equitable response is required to meet the current and future health care needs of Justice Health patients affected by hepatitis C. Below is a summary of issues that as a result of this review have been identified as fundamental to the development of a successful model of care. These are described in further detail in section 5.

- Development and implementation of a targeted management plan for adults and young people affected by hepatitis C across the continuum from prevention to treatment.
- Centralisation of the majority of adult Hepatitis Services across Justice Health via LBH2 outpatients department.
- Maintenance and support of local and regional adult Justice Health Hepatitis Clinics that currently function effectively.
- Patient safety and the streamlining of clinical care.
- Incorporation of the care of hepatitis C affected patients into the service planning of all clinical streams.
- Assessment and identification of the educational needs of Justice Health staff and subsequent development and implementation of relevant professional development across Justice Health.

Summary of Recommendations

Recommendation No 1

All clinicians who coordinate Hepatitis C management should undertake an accreditation process specific to hepatitis C management.

Recommendations No 2

Population Health identifies Core Skills in Hepatitis C management for PSHN, Hepatitis Clinical Care Nurses, Primary Health Care Nurses, AOD and Mental Health nurses and CMO's/GP's.

Recommendation No 3

Population Health develops (in collaboration with Learning and Development) a Clinical Accreditation Program in the Care and Management of Hepatitis C for PSHN, Hepatitis Nurses and other interested Justice Health clinicians who wish to undertake specialist education in this area.

Recommendations No 4

Population Health defines the types of services provided, the eligible population(s), the extent of services provided and consider associated specialist and generalist nursing hour requirements for hepatitis C care and management.

Recommendation No 5

Population Health enters into discussions with Adult Clinical and Nursing Operations and Primary Health to ensure all nurses, and not just the PSHNs assume responsibility for the management and follow-up of Hepatitis C affected patients.

Recommendation No 6

Population Health enters into discussions with Primary Health to ensure Justice Health Career Medical Officers (CMO's) and visiting GP's provide clinical support to specialist nurses in the absence of the visiting Medical Hepatitis Specialists.

Recommendation No 7

Population Health undertakes a tiered service mapping process to clearly delineate roles of generalist nursing and medical staff, specialist nurses, accredited GPs/CMOs and specialist VMOs / Staff Specialists.

Recommendation No 8

Population Health incorporates assessment and ongoing monitoring of chronic Hepatitis C into Long Term Health plans.

Recommendations No 9

Population Health reviews the format and terms of reference for the Hepatitis Group Meeting to improve VMO involvement and attendance.

Recommendation No 10

Population Health in consultation with the Medical and Dental Appointments Advisory Committee (MADAAC) revise VMO contracts and include liver biopsy privileging.

Recommendation No 11

Population Health develops a policy and procedure for performing Liver Biopsy in Justice Health.

Recommendations No 12

Population Health facilitates cross-stream discussions to ensure a multidisciplinary approach to the prevention and management of Hepatitis C. This should include:

- Shared care arrangements
- Co-morbidity management
- Stream specific assessment guidelines.

Recommendation No 13

Population Health facilitates professional development so that staff across JH have the capacity to:

- Undertake routine monitoring of patients with chronic hepatitis C
- Refer to specialist Nurse, MO and VMO appropriately
- Safely manage patients on treatment in the absence of a specialist nurse
- Safely transfer and discharge patient.

Recommendations No 14

Population Health develops guidelines for appropriate placement of Hepatitis C patients through:

- Service model development
- Medical holds policy.

Recommendations No 15

Population Health develops and pilots a centralised model of care at LBH2 to inform model of care development, with a view to facilitating greater access to centralised services across Justice Health in sites where patients do not have local access.

Recommendation No 16

Population Health enters into discussions with local hospital hepatology clinics to facilitate urgent consultations and ongoing management if local Justice Health VMO/hepatology services are unavailable.

Recommendations No 17

Population Health facilitates discussions to increase the capacity of Mental Health and AOD services to incorporate hepatitis C related issues into their assessments of referred patients from hepatitis specialists.

Recommendation No 18

Population Health facilitates discussions with Mental Health and AOD Clinical Streams to include the management of referred patients with chronic hepatitis C within AOD service planning.

Recommendation No 19

Mental Health and AOD clinical streams develop hepatitis C treatment specific assessment guidelines to facilitate management of referred patients.

Recommendation No 20

Clinical Operations Meeting make recommendations on the management of pathology results in Justice Health and facilitate policy development.

Recommendation No 21

Population Health develops a service model that incorporates specialist hepatitis nurses.

Recommendations No 22

Population Health develops protocols and pathways for the management of patients with Hepatitis using telehealth/telephone consultation.

Recommendation No 23

Population Health develops and implements standard documentation to be used by all clinician undertaking hepatitis C related management.

Recommendation No 24

A working party is established to oversee the process of medication transfers and develop systems to minimise or prevent lost medications.

Recommendations No 25

Population Health develops standardised effective discharge planning system through:

- Collaboration between Justice Health clinical programs to further develop discharge planning process.
- Development of partnerships with AHS to facilitate transfer of care for those released to AHS and back again for recidivists.
- Development of community GP's who are hepatitis C S100 prescribers for referral of patients under a shared care agreement.

Recommendation No 26

Population Health contributes to the revision of the Medical Holds policy.

Recommendation No 27

Population Health develops a database to standardise data collection for Hepatitis Services.

Recommendation No 28

Population Health Patient Safety Meeting monitors treatment interruption incidents and works with other streams to prevent occurrences.

Recommendation No 29

Population Health develops nurse led hepatitis clinics across Justice Health through the creation of designated Hepatitis Clinical Care Registered Nurse positions/hours in all clinics/regions/clusters.

Recommendation No 30

Population Health develops a proforma letter to assist with discharge planning.

Recommendation No 31

Population Health in consultation with Adolescent Health determines priorities of care, associated clinical guidelines and staff training needs for the management of young people in custody affected by hepatitis C.

These recommendations, relevant progress reports and outcomes will form part of the *Justice Health Hepatitis C Services Review Action Plan*.

1.1

Hepatitis C Services in Justice Health: A Review

The Hepatitis C Services provided by *Justice Health*, reflected in the *Justice Health Hepatitis C Strategic Directions Document*² are a source of pride within the Population Health Stream. The services provided to patients are of a high standard and are comparable in quality to those available in the community.

Justice Health hepatitis C services have been in place for a number of years and during this time they have evolved and improved with a fixed budget and a workforce that has only expanded slightly, but has been decentralised to ensure all sites have a specialist PSHN. During this time, the number of incarcerated inmates has increased and the high prevalence of hepatitis C among prisoners has become known. It is timely therefore, that a review of hepatitis C services is conducted.

The purpose of this document is to review the range of hepatitis C services provided by Justice Health to its patients. The focus of the document is to examine the services currently offered from the perspective of patients' equity of access to services, the skill and knowledge base and professional development of staff and future directions in clinical service delivery. The document includes an overview of current service provision, presentation of consultation findings and recommendations for the future delivery of services.

Information pertaining to the specific health outcomes for patients of the specialist hepatitis C services is beyond the scope of this document. The Centre for Health Research in Criminal Justice has recently completed a Hepatitis C Clinical Outcomes Review, which will provide this information.

1.2

Justice Health Profile

The mission of Justice Health is to achieve measurable and sustained health outcomes leading to international best practice for Justice Health patients.

Justice Health patients are inmates and young people in custody who reside within NSW Correctional Centres, Periodic Detention Centres, Police Cells, Court Complexes, Juvenile Detention Centres, transitional Centres, the Adult and Youth Drug Courts and inmates who are released under the Correctional Centre Release Treatment Scheme (CCRTS).

Justice Health is responsible for the provision of health services for more than 24,000 people annually³. The major clinical programs are:

- Population Health
- Primary Health
- Mental Health
- Drugs and Alcohol (AOD)
- Adolescent Health
- Aboriginal Health
- Women's Health.

1.2.1 Population Health Clinical Program

The clinical role of the Population Health Unit includes:

- Implementation of the Targeted Screening Program (TSP) for Blood Borne Viruses (BBV) and Sexually Transmissible Infections (STI)
- Provision of hepatitis B, hepatitis C and Human Immunodeficiency Virus (HIV) prevention and care services
- Prevention and management of communicable disease outbreaks
- Coordination of sexual assault management
- Infection control and sterilizing
- Environmental Health
- Surveillance.

The service is managed by the Service Director Population Health, and staff within this program comprise:

- Clinical Nurse Consultant (CNC) Sexual Health/Hepatitis C

- CNC Hepatitis/HIV Clinical Care
- CNC Infection Control
- Coordinator/CNC Public Health
- Surveillance Officer
- Environmental Health Officer
- 2 Project Officers
- Public/Sexual Health Nurses (PSHN) who together form a network across Justice Health. These Nurses provide a service within every correctional and detention facility and are supported in their practice by the CNC's
- Associated medical specialists comprising:
 - A visiting HIV/Sexual Health Physician (via Memorandum of Understanding with Sydney Sexual Health Centre), who provides on site clinics and ongoing support and advice by telephone.
 - A network of Visiting Medical Officer (VMO) Hepatitis Specialists.

Note: a proposed management restructure to enhance service development and delivery has recently been approved by Justice Health Board and Executive.

1.2.2 Working with Department of Corrective Services and Department of Juvenile Justice to Achieve Health Outcomes

Justice Health works in partnership with the Department of Corrective Services (DCS) and the Department of Juvenile Justice (DJJ) to achieve optimum health outcomes for patients. The operational role of DCS and DJJ in managing security is important for the safety of health care workers (HCW). It is also pivotal to both the ease with which patients can access HCW, and to the management of patients' health care needs by HCW. For example, operational issues can interrupt both patients' access to HCW and HCW access to their patients. Such issues include transportation of patients within the custodial system, often without warning, and cell 'lock downs' (during which all patient movements within the centre are ceased)⁴.

In addition to its role in managing security, DCS and DJJ also provide some AOD counselling, prevention education and offer some HIV and hepatitis C health promotion programs. This occurs through a designated department called the HIV Health Promotion Unit (HHPU) in DCS and through the

Department of Education and Training (DET) in DJJ. While Justice Health and DCS/DJJ have distinct roles to play in relation to patients' health, there are some areas of potential overlap, particularly in the areas of health promotion and prevention related to BBV.

1.3

Adult Prison Population Profile

The full time adult prison population for June 2006 was reported to be approximately 9300, generally comprising of 8,700 men and 600 women⁵. In the five 5 years prior to 2003, the average annual population increase has been 5.5 percent. Whilst in custody, inmates are frequently moved between gaols and between court and gaol. Inmate movements over 12 months number approximately 250,000⁶.

The average age of male and female inmates is 33 and 31 years respectively. Around half of all inmates are under 30 years of age. Seventeen percent of male and 23 percent of female inmates are Aboriginal and/or Torres Strait Islanders and 23 percent are from culturally and linguistically diverse (CALD) backgrounds⁷.

The majority of sentences served by adult inmates are short, with 56 percent remaining in custody for more than 30 days and only 10 percent being incarcerated for longer than 6 months. Twenty seven percent of inmates are incarcerated for less than 8 days⁸.

The health of inmates is generally poor. In addition to health issues related to injecting drug use, such as the high prevalence of hepatitis C among the prison population, a large proportion of inmates report other significant health issues. For example, 33 percent of men and 59 percent of women have been diagnosed with a mental illness, 45 percent of men and 33 percent of women report a history of head injury and 3 percent report having been diagnosed with diabetes. Inmates' socioeconomic backgrounds are often disadvantaged, with many achieving no school qualification and unemployment is high⁹.

1.4

Young People in Custody Profile

Young offenders are defined as aged between 10 and 18 years. Ninety percent of young people in custody are male and 41 percent identify as Aboriginal and/or Torres Strait Islander. The average number of young people in custody being cared for by Justice Health at any one time is approximately 300¹⁰.

A large number of young people in custody report a history of abuse. The *2003 Young Person in Custody Survey* found that 42 percent of respondents reported they had been physically abused, 37 percent emotionally abused, 11 percent sexually abused, 34 percent reported physical neglect and 38 percent reported they had experienced emotional neglect. Forty three percent of participants had a history of parental imprisonment and 11 percent had a parent who was currently incarcerated¹¹.

The survey showed that the health of young people in custody is generally poor. Overall, 28 percent of young men and 56 percent of young women reported a diagnosis of asthma and 32 percent of young men reported a mild hearing loss¹². Nineteen percent of males and 24 percent of females have seriously considered attempting suicide at some time in the past and 84 percent report having experienced symptoms (ranging from mild to severe) consistent with a clinical psychiatric disorder¹³.

1.5

Hepatitis C and the Prison Population

In the *2001 NSW Adult Inmate Health Survey*, approximately 40 percent of men and 64 percent of women were identified as hepatitis C positive¹⁴. Given the full time inmate population of NSW is approximately 9000, the number of inmates who are hepatitis C positive at any one time is likely to be around 3,600. Of those, 25 percent have probably cleared the virus, leaving around 2700 inmates who are likely to have chronic hepatitis C within Justice Health at any one time. This has the potential to

negatively impact upon patient morbidity, the incidence of disease transmission and service provision requirements.

Of those inmates who have chronic hepatitis C, a small number will also be either hepatitis B surface Antigen positive or HIV antibody positive (known as co-infection), and an even smaller number may have all three. These patients are likely to have complex health care needs and require additional nursing and medical care and services.

Within the juvenile system, 8 percent of males and 18 percent of females have been shown to be hepatitis C positive. This is lower than the adult inmate population but significantly higher than the general population¹⁵.

1.6

Hepatitis C and the Risks in the Custodial Environment

The *2001 NSW Adult Inmate Health Survey* documented that 73 percent of women and 53 percent of men had injected drugs at sometime in the past and that of those with a history of injecting drug use, 62 percent of women and 48 percent of men had injected in custody. The survey also found that of those who had injected whilst in custody, the majority had re-used a syringe and/or injecting equipment¹⁶. These reused syringes are likely to be in a poor condition and there may be little opportunity for cleaning before and after use due for example, to lack of time or lack of knowledge. This is likely to have an impact upon the risk of acquiring hepatitis C in the custodial environment.

The *2003 NSW Young People in Custody Health Survey* showed that 19 percent of adolescents (17 percent of young men and 47 percent of young women) reported having injected drugs in the twelve months prior to custody. Twenty nine percent of these reported having shared injecting equipment between 1 and 6 months prior to interview¹⁷. No data is available about young people's injecting behaviour whilst in custody in NSW Juvenile Detention Centres.

Other risks related to incarceration and hepatitis C transmission include tattooing and piercing with homemade equipment that is potentially used on

multiple inmates with either no or inadequate cleaning¹⁸. Also the high prevalence of hepatitis C within the custodial environment means that blood to blood contact that occurs through physical and sexual assault and through the sharing of personal items such as razors and barbering shears are also potential risks for acquiring hepatitis C^{19, 20}.

1.7

The Impact of Hepatitis C on the Health of Patients

Chronic hepatitis C can impact upon individuals' quality of life by affecting sleep and sleep quality, vitality and mental health (commonly related to depression and anxiety)²¹. Patients trying to manage issues such as insomnia, fatigue, feelings of general malaise, depression or anxiety may find that the impact of these factors on health are amplified through being away from their home environment. This might be due for example, to a lack of access to strategies they might normally use to improve symptoms, or to enforced minimal contact with family and friends. Co-infection will also affect patient morbidity within the custodial environment. However, it is important to note that the lack of discrimination by, and potentially enhanced access to, health care workers due to incarceration may have a positive impact upon the health of some patients with chronic hepatitis C.

1.8

Research

A number of Justice Health and collaborative research initiatives have informed the development of services for inmates with hepatitis C and placed the issue on the broader health agenda. These include the 1997 and 2001 Inmate Health Surveys and the National Prison Entrants Bloodborne Virus Survey 2004. The Centre for Research in Criminal Justice has several significant projects related to hepatitis C underway;

1. Hepatitis Incidence and Transmission in Prisons Study Phase 2.
2. Hepatitis C Clinic Outcomes Review.
3. "ATAHC" Australian Trial in Acute Hepatitis C.

Clinical management of hepatitis C within Justice Health is guided by the Multidisciplinary Justice Health Hepatitis Policy and the *Hepatitis Clinical Management Guidelines and Information Manual*²².

Justice Health adult patients are able to access clinical services related to hepatitis C via the Population Health Clinical Program. These services are generally provided by:

- Public/Sexual Health Nurses
- General Practitioners in some centres (limited to one or two women's centres)
- Visiting Medical Officers who specialise in hepatitis C.

2.1

Role of the Population Health Clinical Program in the Care of Hepatitis C Affected Adult Patients

The Population Health Program is predominantly implemented across Justice Health by the clinical network of PSHN who are clinically supported by the Population Health CNC's and VMO Hepatitis Specialists. The program provides a range of harm minimisation, health promotion and clinical services related to hepatitis C including:

- Promotion of hepatitis C transmission prevention through harm minimisation education and counselling.
- Risk assessment and screening for blood borne viruses, including provision of prevention information and early detection of hepatitis C.
- Clinical care and management of patients with acute and chronic hepatitis C, including:
 - Promotion of health through routine monitoring, provision of health advice and exploration of transmission prevention strategies
 - Identification and triage of patients eligible for treatment
 - Referral to specialist hepatitis services
 - Coordination of specialist hepatitis services (in some sites)
 - Facilitation of patients' progression towards treatment including pathology collection, education and counselling
 - Management of patients receiving treatment (including initiation onto treatment and regular and frequent follow up of patients, pathology

collection, management of results, identification and management of side effects)

- Post treatment follow up
- Discharge planning.

- Some limited group health promotion and prevention programs*.
- Referral across Justice Health programs to address multiple and complex health concerns including AOD and mental health issues.
- Discharge planning and referral, ensuring continuity of care²³.

**Note: The major providers of group health promotion and prevention programs for patients are the DCS HHPU. The prevention messages that occur through such programs are extremely important especially in the current context of delivering care in an environment where it is becoming increasingly difficult for HCW to access patients. However, the DCS HHPU has limited capacity to provide services with only three staff to provide education across the state.*

2.2

Care and Management of Hepatitis C Affected Adolescent Patients

Justice Health commenced services to young people in custody in 2003, therefore planning and implementation of hepatitis C related services within the Juvenile Justice environment is in its early stages. However, discussions with Area Health Services about models of service delivery are well underway. Currently Adolescent Health patients are able to access hepatitis C related clinical services

via a range of avenues. In some centres Adolescent Health nurses are able to clinically manage patients, while in others patients are referred to visiting General Practitioners (GPs) or visiting Sexual Health Services.

Hepatitis C antibody rates in the young people in custody population are significantly higher than the community, but significantly lower than the adult inmate population²⁴. It is therefore, likely that the focus of management related to hepatitis C in this population will be different from that for the adult incarcerated population. For example, the primary emphasis may be related to prevention rather than management and treatment. Indeed, services that are currently provided are focused on harm minimisation, assessment and screening, with young people presenting with chronic hepatitis C managed on a case-by-case basis. However, as the current service delivery model for young people in custody was developed when biopsy was still a pre-requisite to treatment. It is timely to review the model of hepatitis service delivery to young people in custody.

2.3

Public/Sexual Health Nurses Role within Justice Health

Within the community, routine assessment, screening for hepatitis C and routine monitoring of patients with hepatitis C, would generally occur through a range of primary health care agencies such as General Practitioners and Sexual Health Centres. Nurses who undertake risk assessment and screening in this context are most likely to be specialists in Sexual Health.

Hepatitis C positive individuals who wish to pursue treatment in the community are referred from these primary health care agencies to specialist physicians. Patients who attend physicians in this tertiary context are commonly both clinically and psychologically supported by specialist hepatology nurses who are often working at an advanced level (for example a CNC) as part of a specialist hepatitis service. They also have access to other health services provided by tertiary institutions such as AOD and mental health services.

This differs from the model of care currently implemented within Justice Health, where a network of PSHN provide both specialist sexual health and specialist hepatitis nursing services within each adult NSW Correctional Centre. These nurses apply a range of skills in providing care to patients affected by hepatitis C across a continuum from those who are hepatitis C negative and at risk, through to those who are hepatitis C positive and undergoing treatment.

The number of allocated hours for this service varies between centres and ranges from 40 hours a week in some larger centres to eight hours a week in some of the smaller ones. At the time of writing, there were approximately 12 full time equivalent PSHN's employed within Justice Health. These positions manage the sexual health and hepatitis related needs of all Justice Health patients.

Designated PSHN positions were developed by the Population Health Unit in order to implement the Targeted Screening Program for BBV and STI in a strategic and equitable way across all Justice Health adult correctional centres. Essential criteria for these positions are focused on the skills and knowledge required to undertake this specific role, which includes screening, diagnosis and management of BBV.

The incorporation of ongoing routine and specialist hepatitis C management as a part of the PSHN has occurred over time, due in part to the Population Health Unit assuming responsibility for hepatitis C clinical services and developing a number of specialist hepatitis clinics across Justice Health. It has also occurred as a result of the high prevalence of hepatitis C within the population, creating a need for the PSHN to increase their knowledge and skills around hepatitis C in order to respond to patients' needs. Increased knowledge and skills in hepatitis C over time has been achieved through professional development provided by Population Health and the nurses' self directed learning.

The current level of skills and knowledge of PSHN in the specialty of hepatitis C is varied and is directly affected by the hours allocated to Public/Sexual Health in each centre, the service needs of their centre (e.g. whether they coordinate a hepatitis C clinic) and the length of time they have been employed in the position. PSHN level of skills and knowledge related to hepatitis C service provision can be categorised into three tiers:

Tier 1 All PSHN have the knowledge and skills to screen patients for BBV including pre and post-test discussion and giving positive results (initially with the support of the CNC Sexual Health and Hepatitis C), which is seen as a core skill for all PSHN. The PSHN in this tier do not yet have the knowledge and skills to provide ongoing monitoring, to refer patients for treatment or to manage patients on hepatitis C treatment.

Tier 2 These nurses' skills in the specialty are more advanced than those in tier 1 and they will be able to manage complex presentations pertaining to BBV and STI screening. They will also be competent to give positive results autonomously. Many PSHN in this tier have knowledge and experience that enables them to routinely monitor hepatitis C positive patients and refer them to a hepatitis clinic. They may also be able to manage patients on treatment with CNC support.

Tier 3 PSHN who coordinate hepatitis clinics as part of their PSHN role are either practicing at the same level as hospital based Specialist Hepatology Nurses (in addition to their specialist sexual health roles described in tier 2) or are developing competencies to do so.

These three tiers go some way to explaining the variability in practice that exists between rural/regional goals and metropolitan goals with respect to routine ongoing hepatitis C monitoring and referral to specialist clinics. Data collected for the purpose of this review demonstrates there is a lack of standardisation in the delivery of both sexual health and hepatitis services across all Justice Health sites. For example, the percentage of time reported by PSHN as being spent managing hepatitis C positive patients, who are not under specialist care, ranged from nil to 70 percent.

2.3.1 Patient Satisfaction

It is important to note that despite the lack of standardisation and perhaps in part because the PSHN aim to meet the needs of the patients referred to them in each centre, the *2004 Inmate Access Survey* showed that PSHN have the highest inmate satisfaction rating of all Justice Health staff²⁵.

2.4

Public/Sexual Health Nurses Professional Development

As previously discussed, the model of care currently implemented in Justice Health for sexual health and hepatitis C services requires nurses to have skills and knowledge in two specialist areas. This can result in them having to manage the conflicting priorities of two different types of service (in addition to the more traditional Public Health aspects of their role). They are also required to work in isolation from other PSHN as only one specialist nurse is allocated to each Centre.

Identifying a set of essential core clinical skills for this group of Nurses and providing ongoing professional development has been therefore extremely important to the delivery of safe and effective patient care. The core skills identified, focus around the competencies required to safely and effectively implement the Targeted Screening Program for BBV and STIs. Professional development for PSHN occurs through two avenues:

1. All Nurses employed as PSHN are required, as a condition of employment, to undertake and successfully complete the Justice Health Clinical Accreditation Program: Screening and Management of Blood Borne Viruses in the Correctional Environment. This is a comprehensive clinical teaching program which results in newly accredited nurses being able to practice at least at the level of tier one and possibly tier two. The program is comprised of a face-to-face theory component, self-directed learning, supported clinical practice, written assessment and clinical assessment. Nurses who successfully complete this program can apply to the University of Technology Sydney for recognition of 6 credit points towards further study.

Recommendation No 1

All clinicians who coordinate Hepatitis C management should undertake an accreditation process specific to hepatitis C management.

2. PSHN attend a once or twice-yearly meeting (depending upon funding) called the PSHN Network Forum. This forum provides PSHN with the opportunity to network and to access professional development in a range of areas.

Content is designed to meet their identified learning needs related to their roles and responsibilities, and includes continuing education around hepatitis C. The forum also provides the opportunity for nurses to share innovations in practice and look at systems issues and clinical issues related to the provision of client care.

Whilst the PSHN have and will continue to receive education around hepatitis C, it would be beneficial to the provision of standardised care across Justice Health that a set of core skills and a Clinical Accreditation Program for hepatitis C be developed, incorporating a clinical teaching and assessment component. It would also provide the opportunity for nurses working outside the specialty of PSHN to gain valuable skills and knowledge in hepatitis C diagnosis and management.

Recommendation No 2

Population Health identifies Core Skills in hepatitis C management for PSHN, Hepatitis Clinical Care Nurses, Primary Health Care Nurses, AOD and Mental Health nurses and CMO's/GP's.

Recommendation No 3

Population Health develops (in collaboration with Learning and Development) a Clinical Accreditation Program in the Care and Management of Hepatitis C for PSHN, Hepatitis Nurses and other interested Justice Health clinicians who wish to undertake specialist education in this area.

In addition, recognising the importance of service evaluation and its relevance to professional development and standardisation of services, Population Health has recently developed a *Clinical Services Assessment Tool*. The purpose of this tool is to evaluate, in each Justice Health clinic, Population Health service delivery against the relevant policies, procedures and documentation requirements.

Note: At the time of writing at least one Adolescent Health Nurse from each Juvenile Detention Centre is undertaking the Clinical Accreditation Program and each centre is represented at the PSHN forum by an Adolescent Health Nurse.

2.5

Specialist Hepatitis Services

Specialist hepatitis services are available through two avenues within Justice Health. Patients may be referred to a central monthly clinic held in the Outpatients Department, Long Bay Hospital Area 2 (LBH2). Patients from any adult male correctional facility can be transferred here and be seen by a VMO Hepatitis Specialist. In some centres however they can be referred to a hepatitis clinic run in their correctional centre clinic, or to a correctional centre clinic within their region.

These specialist services are provided by a number of VMO's who are employed to conduct sessions, generally on a monthly basis from 2 and 6 hours, depending upon the needs and the size of the centre. The specialists are all S100 (hepatitis C) prescribers and come from a variety of different medical backgrounds including Immunology, Alcohol and Other Drugs and Hepatology. Each hepatitis clinic is coordinated by the PSHN at the centre in which it is held and specialists are available after hours via an on call roster. This roster is coordinated by the CNC Sexual Health and Hepatitis C.

Similarly to Public/Sexual Health Nursing practice, there was a need to standardise these medical services and the *Hepatitis Clinical Management Guidelines*²⁶ were developed to assist in this process. In order for standardisation of practice to occur, parameters around a range of broad clinical issues need to be defined by Population Health. Issues include identification of the target population for services, management of patients on treatment with associated, potentially high-risk side effects and the procedure of liver biopsy and associated privileges.

Recommendation No 4

Population Health defines the types of services provided, eligible population(s), the extent of services provided and consider associated specialist and generalist nursing hour requirements for hepatitis C care and management.

Recommendation No 5

Population Health enters into discussions with Adult Clinical and Nursing Operations and Primary Health to ensure all nurses, and not just the PSHNs assume responsibility for the management and follow-up of Hepatitis C affected patients.

Recommendation No 6

Population Health enters into discussions with Primary Health to ensure Justice Health Career Medical Officers (CMO's) and visiting GP's provide clinical support to specialist nurses in the absence of the visiting Medical Hepatitis Specialists.

Note: And/or focus on specialist nurse led clinics across JH linked into a specialist VMO at LBH2.

Recommendation No 7

Population health undertakes a tiered service mapping process to clearly delineate roles of generalist nursing and medical staff, specialist nurses, accredited GPs/CMOs and specialist VMOs/Staff Specialists.

Recommendation No 8

Population Health incorporates assessment and ongoing monitoring of chronic Hepatitis C into Long Term Health plans.

2.6

Professional Development of Specialists

Communication between VMO Hepatitis Specialists occurs during a biannual meeting of a group called the Justice Health Hepatitis Group. This group is comprised of the Service Director Population Health, Director Centre for Health Research in Criminal Justice, Clinical Nurse Consultant Sexual Health/Hepatitis C, CNC HIV and Hepatitis Clinical care LBH2 and all VMO Hepatitis Specialists. The group is chaired by A/ Prof Andrew Lloyd, VMO LBH2. This communication forum is used to discuss clinical and systems issues and new innovations in the field of hepatitis C management in the context of service provision in the custodial environment. However, there is often difficulty in bringing this group together due to conflicting schedules and there is a need to review the twice-yearly meeting. Population Health is currently reviewing terms of reference for this meeting.

Recommendation No 9

Population Health reviews the format and terms of reference for the Hepatitis Group Meeting to improve VMO involvement and attendance.

In relation to professional development pertaining to specific clinical practice and procedures, the only invasive procedure undertaken by a number of these specialist VMO's is liver biopsy. This is a procedure with some risk to the patient. Accordingly a process of accreditation to demonstrate competence is being defined by Justice Health as a prerequisite to performing liver biopsy within the system. Specialists who have not been accredited will not be permitted to perform liver biopsy within Justice Health and liver biopsy privileging will be clearly defined in each VMO hepatitis specialist contract.

Recommendation No 10

Population Health in consultation with the Medical and Dental Appointments Advisory Committee (MADAAC) revise VMO contracts and include liver biopsy privileging.

Recommendation No 11

Population Health develops a policy and procedure for performing Liver Biopsy in Justice Health.

2.7

Role of Other Justice Health Clinical Programs in the Care of Hepatitis C Affected Patients

With the exception of one or two clinics* services to patients with hepatitis C are provided by Population Health Staff. When a need for referral is identified and the specialist, (for example Mental Health clinician) or generalist (for example General Practitioner) staff member has the hepatitis C related skills and knowledge to manage the identified problem and the time to see the patient for hepatitis C related issues, then a consult will occur. To date there has been no multidisciplinary or multi-specialty approach to the prevention or management of hepatitis C.

Promoting prevention and providing comprehensive management of hepatitis C requires a cross-stream strategic organisational response. Across Justice Health, there is great potential for a collaborative approach and the development of a reciprocal referral system. How this might occur has yet to be formalised, but will require both collaboration and planning between clinical programs and work force development (see section 5).

Recommendations No 12

Population Health facilitates cross-stream discussions to ensure a multidisciplinary approach to the prevention and management of Hepatitis C.

This should include:

- Shared care arrangements
- Co-morbidity management
- Stream specific assessment guidelines

*Note: the exceptions to this are:

- *Emu Plains where the GPs generate referrals for the local hepatitis clinic, a role that in other centres is undertaken by PSHN (see page 17, section 3, Consultation for more detail).*
- *Mulawa where the GPs see women who have severe hepatitis related symptoms. This has occurred in response to clinical need at Mulawa and highlights the importance of developing a flexible model of care within a Justice Health for hepatitis C services.*

2.7.1 Primary Health

The primary health clinical program has not been involved to date in the planning, implementation and evaluation of hepatitis C related care. However, support and collaboration does occur locally in a small number of centres (see note above).

2.7.2 Mental Health

Mental Health services are available to patients in all centres that provide a hepatitis clinic, either through:

- Referral to a Psychiatrist or Mental Health Nurse locally
- Access to Psychiatrist remotely via telehealth
- The on call system
- Transfer to Long Bay.

However, to date Mental Health clinicians have not received any formal education related to hepatitis C and the issues associated with treatment and mental health related side effects.

2.7.3 Alcohol and Other Drug Services

Referral to these services is available through some, but not all centres that provide a Hepatitis C Clinic. Where services are not available, counselling is provided by those PSHN who have skills and knowledge in this area.

A significant part of this review has been the consultation that was conducted via range of methods (documented below). It is important to note that this review has been a dynamic process that has occurred over time, with the process itself instrumental in many of the changes that have been made and strategies that have been implemented in hepatitis related service delivery within existing resources. Both the responses from these consultations and a note about each subsequent intervention are therefore documented below.

Consultation Methods

1. Self-administered questionnaire to all PSHN in centres that do not offer specialist hepatitis services.
2. Questionnaire administered by the author to all PSHN in centres which do offer Specialist Hepatitis services.
3. Teleconference between Acting Director Population Health, CNC Sexual Health/Hepatitis C and PSHN who run Specialist Hepatitis clinics.
4. Notes from October 2004 Hepatitis Group meeting.
5. Discussions with Adolescent Health during the monthly Population Health Group meeting.

3.1

Responses from Stakeholders

3.1.1 Hepatitis C Management at Adult Centres Where There is No Visiting Specialist Medical Officer

Responses were elicited from PSHN in every adult clinic in Justice Health that does not run a specialist hepatitis clinic, (numbering 17). There was no response from Junee Correctional Centre Clinic.

As a rule, in centres that do not have a VMO hepatitis specialist, patients are only able to access specialist hepatitis C services through transfer to LBH2 in Sydney. There are four exceptions to this (Parramatta, St Heliers, Kirkconnell and Oberon) where a gaol that doesn't have a hepatitis clinic can send patients to a local gaol clinic that does run one. This system requires the support of DCS management in each local area, as patients' attendance at appointments is dependent upon DCS transportation between gaols. As such, this system works better in some areas than in others.

3.1.1.1 Routine Management of Hepatitis C Positive Patients

From the information collected, it is clear that the percentage of PSHN time spent managing hepatitis C positive patients is variable across the 17 clinics surveyed. In some clinics PSHN allocate little or no time to this clinical activity and in others they may spend up to 50 percent or more of their time managing patients routine hepatitis C related health care needs.

In the clinics where little or no hepatitis C management occurs, the main focus of the PSHN work is the implementation of the Targeted Screening Program for BBV and STI. The centres where PSHN are spending more of their time managing patients with hepatitis C and referring them to specialist clinics, are either close to Sydney or have a referral link to a hepatitis clinic in a nearby local gaol. Those that spend less time providing hepatitis C services tend to have few Public Health hours, are in rural gaols and in a few cases have PSHN who are new to the specialty. Sole clinicians also tend to see fewer patients for hepatitis C management. However, one clinic, which has a PSHN one day per week is an exception to this, reporting that 15-40 percent of patients seen in

the previous month were seen for management of hepatitis C. Interestingly, this PSHN works in a gaol, which is linked to a regional gaol hepatitis clinic.

Recommendation No 13

Population Health facilitates professional development so that staff across JH have the capacity to:

- Undertake routine monitoring of patients with chronic hepatitis C
- Refer to specialist Nurse, MO and VMO appropriately
- Safely manage patients on treatment in the absence of a specialist nurse
- Safely transfer and discharge patients.

3.1.1.2 Management of Patients Who Are Transferred to the Centre on Hepatitis C Treatment

A number of nurses have reported having no previous experience of managing patients on hepatitis C treatment and some express a lack of confidence in doing so, should a patient be transferred to their centre on treatment. This is understandable given the complexity in managing patients taking S100 drugs, the intense and frequent follow up requirements, the risks associated with treatment side effects (that are often only identified via pathology) and the coordination of a shared care arrangement between the clinic and the VMO. In addition, in many sites, the PSHN may be rostered for one or two days per week. Ad hoc transfer of patients and a lack of strategic service provision has implications related to safety should patients on hepatitis C treatment be transferred to one of these centres and poses a risk both to the patient and to Justice Health.

Recommendation No 14

Population Health develops guidelines for appropriate placement of Hepatitis C patients through:

- Service model development
- Medical holds policy.

3.1.1.3 Referral of Hepatitis C Positive Patients to Hepatitis Clinics

The majority of patients referred to the hepatitis clinics at LBH2 are reported as being referred from metropolitan gaols. The data showed that regional and rural gaols referred very few patients to LBH2 in the twelve months prior to completion of the

questionnaire. This is likely to be due to the ease of referral and transport in the metropolitan areas versus the barriers to referral documented below. In addition, the knowledge and skills of the PSHN in the area of hepatitis C and the total time designated to PSHN duties in the smaller regional and rural gaols is also likely to impact upon the opportunity for the PSHN to undertake this role in addition to targeted screening. These issues highlight inequity of access to hepatitis C specialist care for patients within Justice Health.

Note: This has since been addressed through a pilot expansion and streamlining of LBH2 services.

Recommendation No 15

Population Health develops and pilots a centralised model of care at LBH2 to inform model of care development, with a view to facilitating greater access to centralised services across Justice Health in sites where patients do not have local access.

Recommendation No 16

Population Health enters into discussions with local hospital hepatology clinics to facilitate urgent consultations and ongoing management if local Justice Health VMO/hepatology services are unavailable.

3.1.1.4 Barriers Identified to the Referral of Patients to the Outpatient Hepatitis Clinic in Sydney (LBH2)

Nurses in gaols do not run hepatitis clinics, or have access to locally run gaol clinics identified the following barriers to referral of their eligible patients to LBH2. The identification of these barriers has led to the pilot expansion and streamlining of LBH2 services previously mentioned.

Barriers Associated with Justice Health

- Lengthy clinic waiting list.
- Monthly clinics available only, resulting in patients classified to regional and rural gaols often having to stay at the LBH2 for months to achieve treatment (resulting in a reluctance to be referred, especially from rural and regional gaols, where patients are more likely to be settled).
- Patient fears about investigative procedures such as liver biopsy.
- Local laboratory cannot perform pathology required for referral or for the management of clients on treatment.

- Impact of transfer to LBH2 on visits (e.g. family).

Barriers Associated with DCS

- Limited or availability of escort officers.
- Court dates coincide with clinic dates.
- Movements limited by DCS.
- Classification/association problems with transfer to gaol with clinic.
- Short sentences.
- Transport sometimes booked but patient not taken.

PSHN Reported Patient Specific Barriers and Concerns

- Patients unaware of where they will live upon release (if there is a likelihood they will be released on treatment).
- Patient has other priorities.
- Too far to travel between Long Bay and the patient's gaol of classification.
- Patients do not want to return to the metropolitan areas once in a country gaol.

3.1.2 Management of Hepatitis C at Adult Centres That Run Specialist Hepatitis Clinics

Responses were elicited from PSHN in every Hepatitis Clinic within Justice Health (numbering 11 clinics)

3.1.2.1 Reported use of the Justice Health Hepatitis Clinical Management and Information Manual

The *Justice Health Hepatitis Clinical Management Guidelines and Information Manual*²⁷ was reported as used by all nurses to guide the clinical care of patients affected by hepatitis C. An occasional variation in the use of aspects of the manual based on visiting specialist preference or circumstance was also reported.

3.1.2.2 Referral to Hepatitis Clinics

In all but one of the 11 gaols, that run a hepatitis clinic, the PSHN are the point of referral. They provide the initial assessment and triage with hepatitis C positive patients. This is a complex and time consuming process and nurses across Justice Health have reported this process as requiring between 1 and 6 consults, with the majority requiring between 3 and 4. Consults are reported to last between 20-60 minutes.

Reasons Given for Reported Variability in the Number of Consults Required and their duration Prior to Referral.

The following are potential reasons identified for some variability at either end of the scale in the number of consults required:

- Where the number of consults is high nurses are also conducting alcohol and other drug assessment rather than referring, due to their additional expertise.
- The number of consults required is dependent on each patient's existing knowledge. That is, the more knowledge they have the less consults they are likely to need.
- The number of consults required is dependent upon the patient's previous contact with PSHN (indicating more knowledge and some investigations already underway thus requiring less consults).
- Patients who are referred to AOD and/or mental health services for assessment require additional consults.
- Visiting specialist may undertake some of the above (thus less nurse consults required).

The information collected around assessment and referral generally demonstrates a commonality of approach and some consistency in practice. However, some variability related to the length of time taken to see patients, the number of times patients were seen pre referral and the specific aspects of care nurses undertake versus visiting specialists was identified from the data.

3.1.2.3 Access to Psychiatric and AOD Counselling for Patients Working Towards Commencing Treatment

Access to AOD and psychiatric assessment was reported as variable:

- In some gaols the only option for an AOD assessment is a DCS worker. Some nurses feel they can refer and some don't use the service often. In other gaols the PSHN or the nurse who specialises in AOD will perform an assessment.
- Psychiatrists were reported as available in centres running hepatitis clinics and patients can be referred. In some clinics psychiatric nurses are conducting assessments. There is currently no professional development available related to the potential mental health related adverse

events that can occur as a result of hepatitis C treatment, which may impact upon the assessment process and outcome for patients. The lack of formalised cross-stream collaboration and professional development in relation to managing patients that require referral creates a risk for both the patient and the organisation. This risk is most significant in the area of mental health, should a patient be commenced on treatment that subsequently results in an adverse event related to a mental health issue, for example the onset of depression leading to suicide.

Recommendations No 17

Population Health facilitates discussions to increase the capacity of Mental Health and AOD services to incorporate hepatitis C related issues into their assessments of referred patients from hepatitis specialists.

Recommendation No 18

Population Health facilitates discussions with Mental Health and AOD Clinical Streams to include the management of referred patients with chronic hepatitis C within AOD service planning.

Recommendation No 19

Mental Health and AOD clinical streams develop hepatitis C treatment specific assessment guidelines to facilitate management of referred patients.

3.1.2.4 Barriers to Commencing Treatment

Liver Biopsy

Whilst liver biopsy has ceased to be a prerequisite for commencing hepatitis C treatment for the majority of patients, there will be some for whom liver biopsy is clinically indicated. Within Justice Health access to liver biopsy has been identified as a significant barrier to commencing treatment in gaols that run local hepatitis clinics (i.e. outside of LBH2). From the clinics surveyed, 66 patients were identified as working towards treatment and of those, 47 required biopsy to continue. These 47 patients were unable to access this service due to a combination of factors including issues with DCS transport and the reluctance or inability of the local Area Health Service to provide the service.

Nursing Hours Available

As previously mentioned the PSHN are responsible for the implementation of the Targeted Screening Program for BBV and STI and also manage a range of often complex needs for patients who present

with chronic hepatitis C. These conflicting priorities impact upon the number of patients that can be safely treated in each centre. In order to maintain patient safety, the numbers of patients initiated onto treatments through the hepatitis clinics are therefore limited.

3.1.2.5 Monitoring Patients on Treatment

The following have been identified as issues that impact upon the nursing care provided to patients on treatment:

- Some unpredictability related to the side effects with pegylated interferon has been reported.
- Nurses are following the protocols regarding the frequency of follow-up, however, some have identified the need to take pathology more frequently to adequately monitor side effects.
- The need to provide emotional support to patients throughout their treatment has been identified as a significant aspect of patient care resulting in more frequent or longer consults.
- Most nurses reported that the general nurses working in their clinic have not received the professional development required to manage a patient with side effects or any other treatment related issue that may arise in their absence (this applied equally to gaols with 40 PSHN hours a week as well as to those ranging between 8 and 24 hours a week). However, in the one gaol where the GP generates referrals* and the general nurses manage the hepatitis clinic, all staff are familiar with side effects and other issues related to hepatitis treatment and are able to manage patients presenting with them.
- In most clinics the PSHN collects the pathology from patients on treatment and follows up the results. In clinics with few Public/Sexual Health hours, pathology is often taken one week and reviewed the next rather than when it arrives back in the clinic from the laboratory. This is likely to be due to the fact that the PSHN are, in most cases the only nurse in each clinic who has the knowledge and skills to manage the results.
- In some clinics however, generally those with few Public/Sexual Health hours, the general nurses collect pathology from patients on treatment, according to the specimen request form completed by the PSHN. They also review the results and contact the PSHN if they are concerned. In others, general nurses collect pathology and the PSHN follows up the results.

Severe and potentially life threatening adverse events can be identified from pathology results and managed through dose reduction. Returned results that are not immediately reviewed by a clinician who is able to interpret them are therefore, preventable risks to both the patient's health and to Justice Health.

** In this clinic the GP undertakes a role in relation to ongoing monitoring and referral of hepatitis C similar to that of the PSHN who coordinate hepatitis clinics.*

Recommendation No 20

Clinical Operations Meeting make recommendations on the management of pathology results in Justice Health and facilitate policy development.

3.1.2.6 Nurses Comments on How to Improve Hepatitis C Services in Justice Health

The Nurses surveyed were asked what they thought would improve Hepatitis Services in Justice Health:

- Allocate designated hours for hepatitis C management.
- Visiting specialists to give notice prior to cancelling clinics.
- Increase knowledge and skills of PSHN outside of the centres that run a Hepatitis Clinic to improve continuity of care.
- Develop a database to facilitate tracking of patients (note: since the survey Justice Health Patient Administration System (PAS) has been implemented).
- Improve capacity to manage patients with chronic hepatitis C amongst Primary Health Care Nurses.
- Improve discharge mechanisms.
- Formal on call arrangement with specialists.
- Better access to biopsy.
- Improve access to patients.
- Less transient patients.

Long Bay:

- Designate specific dates for biopsies.
- More visiting specialist hours (clinics now two weekly instead of monthly within existing funding).
- Employ a designated hepatitis nurse.

Recommendation No 21

Population Health develops a service model that incorporates specialist hepatitis nurses.

3.1.3 Teleconference with Public/Sexual Health Nurses who run Adult Specialist Hepatitis Clinics

Participants included the Acting Service Director Population Health, CNC Sexual Health and Hepatitis C, and the PSHN who coordinate specialist clinics in Justice Health. The majority of specialist clinics were represented at this teleconference during which the following points were introduced for general discussion:

- Role of Justice Health General Practitioners in managing Patients with hepatitis C.
- Telehealth.
- Use of documentation provided in the *Justice Health Hepatitis Clinical Management Guidelines and Information Manual*.
- Management of patients transferred to another centre.
- Discharge planning.
- Nurses ideas for improving hepatitis C services locally.

3.1.3.1 Role of Justice Health General Practitioners in Managing Patients with Hepatitis C

The following clinics reported General Practitioners see patients for hepatitis C related issues:

- At Mulawa the General Practitioner will see unwell patients
- At Emu Plains the General Practitioner is the referral point for the specialist clinic, sees patients and requests required pathology (in a role similar to that of the PSHN in other centres).

Nurses from the other clinics reported that they manage all the hepatitis C related needs of the patients in their centre.

3.1.3.2 Telehealth

Overall there was a positive response to the idea of using telehealth* and telephone to manage hepatitis C positive patients undergoing specialist care. There was a general feeling that it would improve access and equity for patients who want to pursue treatment.

** In subsequent discussions, telephone has been identified as the preferred method of consultation as it is more convenient and no added benefit of telehealth over telephone was seen. Further consultation with VMO's and specialist may be necessary during further the development of a model of care.*

Recommendations No 22

Population Health develops protocols and pathways for the management of patients with Hepatitis using telehealth/telephone consultation.

3.1.3.3 Documentation Provided in the Hepatitis Clinical Management Guidelines and Information Manual

Nurses felt this was adequate, but has to be completed by all specialist nurses and visiting specialists to provide good continuity of care. Currently this does not always occur.

Recommendation No 23

Population Health develops and implements standard documentation to be used by all clinician undertaking hepatitis C related management.

3.1.3.4 Management of Patients Transferred to Another Centre

Referral forms are completed, sent via internal mail and faxed. Nurses only telephone if management is complex or a problem is identified. Identified problems include:

- Lost drugs*.
- The hepatitis treatment record is not consistently completed, making continuity of care difficult.

** PSHN are now completing an incident form and informing pharmacy when prescribed drugs do not arrive with the patient.*

Nurses reported that patients who have had several transfers are difficult to manage especially in relation to:

- Ensuring health assessment and pathology collection occurs on the due date.
- Follow up of results.
- Forwarding results.

A risk exists to both the patient and the organisation as a result of poorly managed transfers.

Recommendation No 24

A working party is established to oversee the process of medication transfers and develop systems to minimise or prevent lost medications.

3.1.3.5 Discharge Planning

This does occur for patients on treatment if they are released with notice, however the method of discharge planning is not consistent across Justice Health. Some nurses are following a system set up by their clinic and some have devised their own system.

Recommendations No 25

Population Health develops standardised effective discharge planning system through:

- Collaboration between Justice Health clinical programs to further develop discharge planning process.
- Development of partnerships with AHS to facilitate transfer of care for those released to AHS and back again for recidivists.
- Development of community GP's who are hepatitis C S100 prescribers for referral of patients under a shared care agreement.

If patients are released without notice the CNC Sexual Health and Hepatitis C is informed and follows up the patient in the community where possible.

3.1.3.6 Nurses Ideas for Improving Specialist Hepatitis C Services

- Shared responsibility for management of patients with Primary Health Care Nurses.
- Consistency in documentation across VMO Hepatitis Specialists and PSHN.
- Telehealth or consultation by telephone.
- Development of a database to enable tracking of patients (note: PAS has been implemented since the consultation).
- Reliable medical holds (see below).
- LBH2: increase VMO hours.

3.1.4 Notes from the October 2004 Hepatitis Group Meeting with Visiting Medical Officers

3.1.4.1 Medical Holds

Participants discussed that medical hold makes little difference to the ability to keep a patient at a treatment centre as security issues always override health issues. A number of VMO Hepatitis Specialists reported that their patients had been transferred despite medical hold. This becomes a risk for both the patient and the organisation,

should the patient be transferred to a gaol where the PSHN does not have the skills and knowledge to safely manage clients receiving treatment.

Recommendation No 26

Population Health contributes to the revision of the Medical Holds policy.

3.1.4.2 Data Collection

Participants discussed the need to collect data from the hepatitis clinics. However, prior to developing a database and a data collection tool, the purpose of data collection needs to be defined. For, example will it be used to monitor the service provided or manage continuity of care. In addition, Population Health needs to have specific and ongoing input into PAS.

Recommendation No 27

Population Health develops a database to standardise data collection for Hepatitis Services.

3.1.4.3 Treatment Interruption as a Result of Patient Movements

This was identified as an issue to address, looking at both system based and individual specific problems. This issue represents a risk for both the patient and the organisation should the efficacy of treatment be affected by a break in treatment.

Recommendation No 28

Population Health Patient Safety Meeting monitors treatment interruption incidents and works with other streams to prevent occurrences.

3.1.4.4 Nurse Led Clinics and Telehealth

VMO's expressed support for nurse led clinics using telephone support or telehealth and also use of telehealth and telephone. This would help to address inequity of service provision in rural and regional gaols that do not have a local medical hepatitis clinic. It would however have professional development implications.

Recommendation No 29

Population Health develops nurse led hepatitis clinics across Justice Health through the creation of designated Hepatitis Clinical Care Registered Nurse positions/hours in all clinics/regions/clusters.

3.1.4.5 Nurse Generated Referral to Community Based General Practitioners (with an interest in Hepatitis C)

Nurse generated referral to community based General Practitioners (with an interest in Hepatitis C) was seen as a good option for patients.

Recommendation No 30

Population Health develops a proforma letter to assist with discharge planning.

3.1.5 Discussions with Adolescent Health during the monthly Population Health Group meeting

The issues related to the management of Justice Health hepatitis C positive young people are complex. Hepatitis C treatment is not available for adolescents under the S100 prescribing criteria.

Young people in custody have been shown to be sexually active and to be having, or at risk of having, unprotected sex that may result in pregnancy, which is contraindicated for hepatitis C treatment.

The role of Adolescent Health in the management of hepatitis C with their patients is likely to be different than in the adult system. This area of hepatitis C clinical care in adolescents requires further investigation and planning.

Recommendation No 31

Population Health in consultation with Adolescent Health determines priorities of care, associated clinical guidelines and staff training needs for the management of young people in custody affected by hepatitis C.

NSW Health

Justice Health receives recurrent dedicated AIDS Program funding of \$1,367,706 annually from NSW Health. These funds support the delivery of screening and clinical services for blood-borne viruses and sexually transmissible infections including specialist services for inmates with hepatitis C.

A small proportion of AIDS Program Funding for Area Health Services is dedicated to hepatitis C services and programs. Justice Health receives \$114,000 (as part of the \$1,367,706). This budget is used to fund Hepatitis VMO.

All other costs for hepatitis services are currently absorbed in the general Justice Health clinical budget apart from pathology costs. These are met by the pathology services of various Area Health Services a longstanding arrangement under NSW Health circular 94/19.

Council of Australia Government funding (COAG)

The Australian Government provides dedicated funding under the Hepatitis C Education and Prevention Initiative (HCEP). The key aims of the initiative are to reduce rates of hepatitis C transmission in Australia and minimise the impacts of the disease on those affected. Justice Health currently receives \$26,000 per annum (non-recurrent). This is used to fund a part time Clinical Nurse consultant position in Hepatitis C clinical care.

Pharmacotherapies

For clients of Justice Health, the cost of combination therapy is covered by the S100 High Cost Drugs Program. Whilst Justice Health ultimately receives full reimbursement for the cost of pharmacotherapies making the actual cost of combination therapy cost neutral, additional expenses are incurred. These include pharmacist's time, transport of medications and maintenance of the cold chain (crucial for combination therapy), to rural and remote areas.

Within the current boundaries of practice that exist around hepatitis C management, Population Health continues to improve and enhance hepatitis services. In order to expand services and address equity and patient safety however, the development and implementation of a cross-stream, patient centred flexible model of care is required. Before such a model can be mapped out and developed, Population Health needs to determine the following:

1. The priorities related to the *types* of Hepatitis C services Justice Health will provide across the continuum for both adults and young people (who may have different service needs than adults).
2. Priority *populations* for Hepatitis C services across the continuum (for example consideration of sentence length, location of patients).
3. The *extent* of the services that will be available to hepatitis C affected patients or populations (for example should routine monitoring be available to all patients with hepatitis C and should treatment be available to all patients for whom it would benefit).

In addition, Population Health will require support from the Justice Health Board and Executive for:

4. Funding to map and plan a flexible and workable model of care.
5. Funding to implement and evaluate the model of care.

5.1

Proposed Directions in Future Model of Care Planning

Population Health has, as a result of this review considered the current model of care and the potential for Justice Health to develop and implement defined equitable, accessible and safe services in the future. The recommendations made in this document are presented in the following tables as issues to consider during service planning. Within this context, these are linked to associated implementation requirements and their implications for Justice Health.

Table 1: Harm Minimisation and Screening for BBV and STI

Planning Issues to Consider	Rationale	Implementation Requirements	Implications for Justice Health
Coordinated approach to harm reduction across JH and with DCS/DJJ.	Address specific transmission prevention issues for people in custody.	Utilise joint harm reduction scoping project facilitated by the AIDS/Infectious Diseases Branch NSW Health and involving the Department Corrective Services, Department of Juvenile Justice and Justice Health to progress harm reduction planning within JH collaboratively with DCS/DJJ.	Requires: <ul style="list-style-type: none"> ■ Justice Health to progress a coordinated response to harm reduction strategies. ■ Justice Health to acknowledge that the prevention, care and management of hepatitis C affected patients is core business. ■ Organisation wide commitment and approach to the planning and implementation of harm minimisation hepatitis C prevention and care services.
All clinicians approach harm minimisation with all patients opportunistically.	Increase knowledge and skills of patients to use the harm minimisation strategies available to them through education and reinforcement.	Professional development for all JH HCW.	<ul style="list-style-type: none"> ■ Commitment from other JH Clinical Programs to collaborate in the planning.
PSHN focus on implementing Targeted Screening Program for BBV and STI as their core role.	Screening and mgt of BBV and STI, immunisation and one to one health education are important in transmission prevention.	Definition of screening and vaccination targets and mapping of required PSHN hours for each centre. Each gaol clinic would require access to a specialist hepatitis nurse. General Nurses to take responsibility for routine monitoring of patients with chronic hepatitis C.	<ul style="list-style-type: none"> ■ Additional funding if more hours identified as being required to provide services than exist within PSHN positions.

Table 2: Increase Capacity of Centralised Hepatitis Clinic LBH2

Planning Issues to Consider	Rationale	Implementation Requirements	Implications for Justice Health
Use evaluation of pilot centralised model of care at LBH2 to inform model of care development which could consider:			
<p>Facilitating greater access to centralised services across Justice Health in sites where patients do not have local access:</p> <ul style="list-style-type: none"> ■ Patients attend LBH2 to see specialist Nurse and VMO and undergo necessary investigations. ■ Patients initiated onto treatment and subsequently managed at gaol of classification. 	<p>Provide a more equitable and accessible service to patients in regional and rural gaols.</p> <p>Better patient care outcomes.</p> <p>More patients will have access to service.</p>	<ul style="list-style-type: none"> ■ Increase visiting Medical Hepatitis Specialists hours at LBH2 (potentially employ Hepatologist). ■ Each gaol clinic would require access to a specialist hepatitis nurse. ■ Services need to be supported by telehealth and telephone. ■ Services to be supported by protocols and clinical pathways (under development). ■ Patients spend short time at LBH2. ■ Professional development so that staff across JH have capacity to: <ul style="list-style-type: none"> – Undertake routine monitoring of patients with chronic hepatitis C. – Refer to specialist Nurse and MO appropriately. – Safely manage patients on treatment in the absence of a specialist nurse (see table 6). – Safely transfer and discharge patients. 	<ul style="list-style-type: none"> ■ Cannot achieve within existing budget. ■ Cost associated with suggested changes related to additional VMO hours. ■ Cost associated with specialist hepatitis nurse. ■ Potential changes to VMO services from visiting specialist to Justice Health Employee. ■ Increase in CNC Hepatitis and HIV clinical Care LBH2 hours and associated costs. ■ Cost of travel for ultrasonographer and VMO. ■ Need to negotiate regarding transport with DCS. ■ Costs associated with professional development.
<p>LBH2 VMO to conduct quarterly hepatitis clinics with mobile ultrasound and undertake biopsies in gaols which do not run a hepatitis clinic for patients who cannot be transferred due to classification as high risk (interim care can be managed via telephone with the LBH2 VMO).</p>	<p>Provide equity of access to patient's classified high risk.</p>	<ul style="list-style-type: none"> – Undertake routine monitoring of patients with chronic hepatitis C. – Refer to specialist Nurse and MO appropriately. – Safely manage patients on treatment in the absence of a specialist nurse (see table 6). – Safely transfer and discharge patients. 	<ul style="list-style-type: none"> ■ Cost of travel for ultrasonographer and VMO. ■ Need to negotiate regarding transport with DCS. ■ Costs associated with professional development.

Table 3: Maintain Local Justice Health Hepatitis Clinics that Work Well

Planning Issues to Consider	Rationale	Implementation Requirements	Implications for Justice Health
It is recognised that there is a need for a range of service delivery models across Justice Health.	<ul style="list-style-type: none"> ■ No need to change existing models that work well. 	<ul style="list-style-type: none"> ■ Collaboration with Primary Health Care Clinical Program. ■ Collaboration with the NUMs. 	Requires: <ul style="list-style-type: none"> ■ Justice Health to acknowledge that the prevention, care and management of hepatitis C affected patients is core business.
Each clinic, through the NUM takes responsibility for the management and follow-up of hepatitis C affected patients – not just sole responsibility of PSHN.	<ul style="list-style-type: none"> ■ Promote capacity building locally. ■ Promote continuity of care. ■ Increase equity of access to services. 	<ul style="list-style-type: none"> ■ Incorporate assessment and ongoing monitoring of chronic hepatitis C into Long Term Health Plans. ■ Professional development for PHCN NUM's, CMO's and GP's (see table 6). ■ Tiered service mapping process undertaken to clearly delineate roles of generalist nursing and medical staff, specialist nurses, accredited GPs/CMOs and specialist VMOs/Staff Specialists. 	<ul style="list-style-type: none"> ■ Organisation wide commitment to the planning and implementation of hepatitis C prevention and care services. ■ Commitment from other JH clinical programs to collaborate in the planning and delivery of services.
Justice Health Career Medical Officers (CMO's) and visiting GP's provide clinical support to specialist nurses in the absence of the visiting Medical Hepatitis Specialists. Note: and/or focus on specialist nurse led clinics across JH linked into a specialist VMO at LBH2	<ul style="list-style-type: none"> ■ Increase Justice Health capacity to manage hepatitis C. ■ Improve patient safety. ■ Increase knowledge and skills related to hepatitis C within primary health. 		<ul style="list-style-type: none"> ■ Commitment from each clinic NUM to the delivery of hepatitis C services. ■ Cost of professional development. ■ Improved model of service delivery to maximise resources and ensure integrated, coordinated model of care for clients.
Develop nurse led hepatitis clinics across Justice Health through the creation of designated Hepatitis Clinical Care Registered Nurse positions/hours in all clinics/regions/clusters.	<ul style="list-style-type: none"> ■ Increase equity of access to services. ■ Increase safety and reduce risk for patient and Justice Health. 	JH to define: <ul style="list-style-type: none"> ■ Types of services. ■ Eligible Population(s). ■ Extent of services. And Consider associated specialist and generalist nursing hour requirements for hepatitis C care and management.	<ul style="list-style-type: none"> ■ Costs associated with developing and recruiting to new positions.

Table 4: Patient Safety and Streamlining Clinical Care

Planning Issues to Consider	Rationale	Implementation Requirements	Implications for Justice Health
<p>Improve communication:</p> <ul style="list-style-type: none"> ■ All clinicians undertaking hepatitis C related management with patients required by Justice Health to complete the standardised documentation. ■ All clinicians who coordinate hepatitis C management required to undergo an accreditation process. 	<p>Ensure patients who are working towards and who undergo treatment are managed safely and effectively (including treatment workup, treatment initiation, follow up, management of side effects, transfer between centres and discharge). Ensure continuity of care.</p>	<p>Population Health Clinical Program to:</p> <ul style="list-style-type: none"> ■ Standardise PSHN practice in managing patients with hepatitis C through identification of Core Skills and Development of Justice Health Clinical Accreditation Course in Hepatitis C Clinical Care and Management (see table 6). ■ Justice Health CMO's and GP's to undertake professional development in hepatitis C. ■ Identify data required to facilitate good communication between centres. ■ Link into Justice Health PAS/UIP and ensure relevant information that can be used for the management of hepatitis C is included within this system as it develops further. 	<ul style="list-style-type: none"> ■ Risk to organisation will be minimised. ■ Will take time if done within existing resources. ■ Cost of professional development.
<p>Referral of patients to local hospital hepatology clinics for urgent consults if clinically necessary.</p>		<p>Develop partnerships and pursue MOU with identified services.</p>	<ul style="list-style-type: none"> ■ Potential costs associated with MOU. ■ Requires cooperation and collaboration between Justice Health and AHS at a high level.
<p>Ongoing management by local hospital hepatology clinics, where available should barriers to accessing Justice Health hepatitis clinics be too difficult to overcome.</p>			
<p>Limit the number of patients commenced on treatment according to PSHN or Hepatitis RN resources available at each site that runs a hepatitis clinic.</p>	<p>Increase patient safety and decrease risk to organisation and to patient.</p>	<p>JH to define</p> <ul style="list-style-type: none"> ■ Types of services ■ Eligible Population(s) ■ Extent of services <p>And Consider associated specialist and generalist nursing hour requirements for hepatitis C care and management.</p>	<ul style="list-style-type: none"> ■ Number of patients treated will always be dependent upon amount of nursing hours, determining extent of services and target populations by JH critical to model of care development.
<p>Standardised effective discharge planning system in place.</p>	<p>Maintain patient safety, promote treatment compliance.</p>	<ul style="list-style-type: none"> ■ Collaboration between Justice Health and all clinical programs to further develop discharge planning process. ■ Development of partnerships with AHS to facilitate transfer of care for those released to AHS and back again for recidivists. ■ Justice Health to develop links with community GP's who are hepatitis C S100 prescribers for referral of patients under a shared care agreement. 	<ul style="list-style-type: none"> ■ Organisation wide approach to discharge planning required. ■ Needs to be seen as a priority.

Table 5: Specific Role of other Clinical Programs in Care of Patients Affected by Hepatitis C

Planning Issues to Consider	Rationale	Implementation Requirements	Implications for Justice Health
Primary Health to include patients with hepatitis C in chronic disease management planning (i.e. long term health plan) and assume responsibility of routine monitoring and opportunistic harm minimisation of patients with chronic hepatitis C.	Monitoring will be available to all Justice Health patients with chronic hepatitis C. Referral to specialist nurses will be appropriate and ensure best use of specialist's time.	<ul style="list-style-type: none"> ■ Collaboration with Primary Health Care Clinical Program to develop a shared care model. ■ Model must be linked to clinical pathways. ■ Collaboration with the NUMs. ■ Incorporate assessment and ongoing monitoring of chronic hepatitis C into Long Term Health Plans. ■ Professional development for PHCN, CMO's and GP's and NUM's (see table 6). 	<p>Cannot achieve within existing budget.</p> <p>Requires:</p> <ul style="list-style-type: none"> ■ Justice Health to progress a coordinated response to harm reduction strategies. ■ Justice Health to acknowledge that the prevention, care and management of hepatitis C affected patients is core business. ■ Organisation wide commitment and approach to the planning and implementation of harm minimisation hepatitis C prevention and care services ■ Commitment from other JH Clinical Programs to collaborate in the planning and delivery of services. ■ Time from each stream to plan and develop shared care model and clinical pathways. ■ Commitment from each clinic NUM to the delivery of hepatitis C services. ■ Cost of professional development.
General Nurses, CMO's and GP's who work in centres that run a local hepatitis clinic are familiar with the identification and management of severe side effects associated with hepatitis C treatment in collaboration with the CNC Sexual Health/ Hepatitis C.	Increase patient safety and decrease risk.		
Mental Health Clinical Stream includes the management of referred patients with chronic hepatitis C within Mental Health service planning.	Referred patients are appropriately assessed regarding the safety of hepatitis C treatment in relation to their mental health and the side effects of treatment.	Professional development for Mental Health Clinicians (see table 6).	
Development of Mental Health hepatitis C treatment specific assessment guidelines to facilitate management of referred patients.			Potential for JH to do some original and significant work in this area.
AOD Clinical Stream includes the management of referred patients with chronic hepatitis C within AOD service planning.	Referred patients are appropriately assessed regarding AOD issues that may impact upon their compliance with and the success of hepatitis C treatment.	Professional Development for D and A clinicians (see table 6).	Requires:
AOD Services develop hepatitis C treatment specific assessment guidelines to facilitate management of referred patients.			<ul style="list-style-type: none"> ■ Justice Health to acknowledge that the prevention, care and management of hepatitis C affected patients is core business. ■ Organisation wide commitment to the planning and implementation of hepatitis C prevention and care services. ■ Commitment from other Justice Health Clinical Programs to collaborate in the planning and delivery of services. ■ Commitment from each clinic NUM to the delivery of hepatitis C services. ■ Cost of professional development.
JH determine priorities of care, associated clinical guidelines and staff training needs for the management of children and adolescents affected by hepatitis C.	Children and adolescents affected by hepatitis C are appropriately and proactively managed.	Collaboration between Clinical Director Hepatitis C, CNC Sexual Health and Hepatitis C and AH to develop a model of care and protocols. Professional Development for AH Nurses.	

Table 6: Professional Development

Planning Issues to Consider	Rationale	Implementation Requirements	Implications for Justice Health
<p>Increase capacity of PSHN Nurses working in rural and regional areas to manage hepatitis C positive clients eligible for specialist referral and who are on treatment.</p>	<ul style="list-style-type: none"> ■ Provide a more equitable and accessible hepatitis service to patients in regional and rural gaols. ■ Increase safety and improve care for patients transferred on treatment. 	<ul style="list-style-type: none"> ■ Population Health to identify Core Skills in hepatitis C management for PSHN, Hepatitis Clinical Care Nurses PHCN, D and A, clinicians, Mental Health Clinicians and CMO's/GP's. 	<ul style="list-style-type: none"> ■ Justice Health to acknowledge that the prevention, care and management of hepatitis C affected patients is core business.
<p>Increase capacity of General Nurses and CMO's/GP's to manage routine monitoring and referral of hepatitis C positive patients to specialist nurse or MO clinics and develop a basic understanding of issues pertaining to treatment.</p>	<ul style="list-style-type: none"> ■ Provide a more strategic and comprehensive service to patients with chronic hepatitis C. ■ PSHN can spend more time on harm minimisation, screening, diagnosis and initial management. ■ Support the provision of specialist services to patients undergoing treatment for hepatitis C. 	<ul style="list-style-type: none"> ■ Population Health to develop (in collaboration with Learning and Development) a Clinical Accreditation Program in the Care and Management of Hepatitis C for PSHN, Hepatitis Nurses and other interested Justice Health clinicians who wish to undertake specialist education in this area. ■ Population Health to develop and implement, (in collaboration with Learning and Development and each clinical stream) continuing education programs for Justice Health Clinicians from Primary Health, Mental Health and D and A clinical streams. 	<ul style="list-style-type: none"> ■ Organisation wide commitment to the planning and implementation of hepatitis C prevention and care services. ■ Commitment from other JH Clinical Programs, Medical Director and JH Learning and Development Centre to collaborate in the planning and delivery of professional development. ■ Commitment from each clinic NUM to the delivery of hepatitis C services.
<p>Increase the capacity of General Nurses and CMO's/ GP's to identify and manage significant adverse events associated with hepatitis C treatment in collaboration with CNC Sexual Health and Hepatitis C.</p>	<p>Increase safety for patients on treatment and decrease risk to patient and Justice Health.</p>	<ul style="list-style-type: none"> ■ Justice Health Learning and Development Centre to incorporate hepatitis C training into New Graduate Program. 	<ul style="list-style-type: none"> ■ Cost of professional development
<p>Increase the capacity of Mental Health and AOD services to incorporate hepatitis C related issues into their assessments of referred patients from hepatitis specialists.</p>	<p>Referred patients will be appropriately assessed in relation to hepatitis treatment, side effects and suitability for treatment.</p>	<ul style="list-style-type: none"> ■ Population Health to liaise with ASHM regarding professional development for CMO's and GP's. 	
<p>Professional development for AH nurses in the management of children and adolescents affected by hepatitis C.</p>	<p>Provide a planned and strategic and service to patients.</p>	<p>Requires development of model of care and protocols.</p>	

References

1. Corrections Health Service Hepatitis C the Challenges, the Response, Strategic Directions 2003-2006: A continuum of Care for prevention and Management of Hepatitis C in the Correctional System.
2. Corrections Health Service Hepatitis C the challenges, the response, Strategic Directions 2003-2006; A continuum of Care for prevention and Management of Hepatitis C in the Correctional System.
3. Justice Health Corporate Plan 2003-2008. Page 3. Available: http://www.chs.health.nsw.gov.au/areas/corrections/docs/corporate_plan_2003-2008.pdf
4. Corrections Health Service Hepatitis C the Challenges, the Response, Strategic Directions 2003-2006. Page 10.
5. NSW Department of Corrective Services Offender Management Report. 18th September 2005. Corporate Research, Evaluation and Statistics Department.
6. Justice Health Annual Report 2004/2005. Page 5. Available: http://www.justicehealth.nsw.gov.au/pubs/jh_ar_04-05.pdf
7. Justice Health Corporate plan 2003-2008. Pages 4-5.
8. Justice Health Corporate plan 2003-2008. Page 4.
9. Justice Health Corporate plan 2003-2008. Pages 4-5.
10. Justice Health Corporate plan 2003-2008. Page 5.
11. 2003 NSW Young People in Custody Health Survey. Page 9.
12. 2003 NSW Young People in Custody Health Survey. Page 15.
13. 2003 NSW Young People in Custody Health Survey. Page 9.
14. Butler T and Milner, L. The 2001 NSW Inmate Health Survey. Page 73.
15. 2003 NSW Young People in Custody Health Survey. Page 15.
16. Butler T and Milner, L. The 2001 NSW Inmate Health Survey. Pages 120-121.
17. 2003 NSW Young People in Custody Health Survey. Page 28.
18. Post, J.J., Dolan, K., Whybin, R., Carter, I. W., Haber, P. S. and Lloyd, A. R. (2001). Acute Hepatitis C Infection in an Australian Prison Inmate: tattooing as a possible transmission route. Medical Journal of Australia 2001, 174 p.183-184.
19. Hepatitis C Council of NSW (2004) An Australian HCV Snapshot, April 2004. Available: http://www.hepatitisc.org.au/quickref/documents/Australian_snapshot.pdf
20. Dore, G. J, Macdonald, M., Law, M. G. Kaldor, J. M. (2003). Epidemiology of hepatitis C virus infection in Australia. In Australian Family Physician Hepatitis C Update. 32(10). P.3.
21. Crofts, N., Dore, G. and Locarnini, S (2001). Hepatitis C An Australian Perspective. IP Communications. Melbourne.
22. Corrections Health Service Hepatitis Clinical Management Guidelines and Information Manual. Sydney, 2003.
23. Corrections Health Service Hepatitis C the challenges, the response, Strategic Directions 2003-2008. Page 12.
24. 2003 NSW Young People in Custody Health Survey. Page 15.
25. Capturing Perceptions, 2004 NSW Inmate Access Survey. Quality Unit/Centre for Health Research in Criminal Justice. Page 16.
26. Corrections Health Service Hepatitis Clinical Management Guidelines and Information Manual. Sydney, 2003.
27. Corrections Health Service Hepatitis Clinical Management Guidelines and Information Manual. Sydney, 2003.