

# Increase in Hepatitis C Treatment in a Marginalised and Disadvantaged Community in Adelaide, South Australia

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## Introduction

- In Australia, chronic hepatitis C (CHC) infection affects approximately 230,000 people.
- In March 2016, the Australian Government, via the Pharmaceutical Benefits Scheme (PBS), became the first country in the world to offer unrestricted access to direct-acting antiviral (DAA) therapy for CHC infection.
- The PBS modified treatment criteria, allowing General Practitioners (GPs) to treat CHC patients: *“Must be treated... in consultation with a gastroenterologist hepatologist or infectious diseases physician experienced in the treatment of chronic hepatitis C infection”*<sup>1</sup>
- Gastroenterological Society of Australia (GESA) and the Australian Liver Association (ALA) created a standardised Remote Consultation Form (RCF) that allowed GPs to initiate DAA therapies in the community with the support of tertiary Specialists.



- The **Royal Adelaide Hospital (RAH)** is the largest public teaching hospital in South Australia (SA).



- The **Brian Burdekin Clinic (BBC)** is a unique multidisciplinary health service that provides health care to disadvantaged, marginal and homeless population within Adelaide, SA. The clinic was established and is coordinated by Dr Damian Mead (GP).

## Aim

To determine the efficacy of a national Remote Consultation Form (RCF) in initiating DAA treatment in the community.

## Methods

- Established new integrated model of care (MOC) between primary (BBC) and tertiary (RAH) healthcare centres for DAA treatment initiation
- Retrospective audit to assess this collaboration was carried out for the period between 1<sup>st</sup> March 2016 and 28<sup>th</sup> February 2017
- RCFs completed at BBC were faxed to the Viral Hepatitis Centre (RAH) to be reviewed by a Specialist prior to treatment initiation in the community

Royal Adelaide Hospital Gastroenterology and Liver Services  
Remote Consultation Request for Initiation of Hepatitis C Treatment  
Hospital Phone: (08) 8222 2081 Hospital Fax: (08) 82225883

FOR ATTENTION OF: Dr \_\_\_\_\_ Date: \_\_\_\_\_

Please note this form is not a referral for a patient appointment.

Note: GPs are eligible to prescribe hepatitis C treatment under the PBS, provided they are experienced in the treatment of chronic HCV infection or they prescribe in consultation with a gastroenterologist, hepatologist or infectious disease physician experienced in the treatment of chronic HCV infection.

GP name: \_\_\_\_\_ GP suburb: \_\_\_\_\_ GP phone: \_\_\_\_\_ GP mobile phone: \_\_\_\_\_ GP email address: \_\_\_\_\_ GP postcode: \_\_\_\_\_ GP fax: \_\_\_\_\_

Patient name: \_\_\_\_\_ Patient date of birth: \_\_\_\_\_ Patient residential postcode: \_\_\_\_\_

**Hepatitis C History**

Date of HCV diagnosis: \_\_\_\_\_

Known cirrhosis\*  Yes  No

\* Patients with cirrhosis or HIV/HIV coinfection should be referred to a specialist

**Intercurrent Conditions**

Diabetes  Yes  No

Obesity  Yes  No

Hepatitis B  Yes  No

HIV  Yes  No

Alcohol > 40 g/day  Yes  No

Discussion re contraception  Yes  No

**Prior Antiviral Treatment**

Has patient previously received any antiviral treatment?  Yes  No

Has prior treatment included Boceprevir/Telaprevir/Simeprevir?  Yes  No

I have checked for potential drug-drug interactions with current medications?  Yes  No

**Laboratory Results (or attach copy of results)**

Test	Date	Result	Test	Date	Result
HCV genotype			Creatinine		
HCV RNA level			eGFR		
ALT			Hemoglobin		
AST			Platelet count		
Bilirubin			INR		
Albumin					

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**Liver Fibrosis Assessment\*\***

Test	Date	Result
FibroScan		
Other (eg. APRI)		

APRI: <http://www.hepatitis.com.au/2012/03/03/apri/>  
\* People with liver stiffness on FibroScan of 12.5 kPa or an APRI score > 1.0 may have cirrhosis and should be referred to a specialist.

**Treatment Choice**

I plan to prescribe (please select one):

Regimen	Duration	Genotype
Sofosbuvir plus Ledipasvir	8 weeks <input type="checkbox"/> 12 weeks <input type="checkbox"/> 24 weeks <input type="checkbox"/>	1
Sofosbuvir plus Daclatasvir	12 weeks <input type="checkbox"/> 24 weeks <input type="checkbox"/> plus Ribavirin <input type="checkbox"/>	3 or 1
Sofosbuvir plus Ribavirin	12 weeks <input type="checkbox"/>	2
Paritaprevir/ritonavir plus Ombitasvir plus Dasabuvir	12 weeks <input type="checkbox"/>	1b
Paritaprevir/ritonavir plus Ombitasvir plus Dasabuvir plus Ribavirin	12 weeks <input type="checkbox"/> 24 weeks <input type="checkbox"/>	1a
Elbasvir plus Grazoprevir	12 weeks <input type="checkbox"/> 16 weeks plus Ribavirin <input type="checkbox"/>	1 or 4

Multiple regimens are available for the treatment of chronic HCV. Factors to consider include HCV genotype, cirrhosis status, prior treatment, viral load, potential drug-drug interactions and comorbidities. See Australian Recommendations for the Management of Hepatitis C Virus Infection: A Consensus Statement (January 2017) (<http://www.gesa.org.au>) for all regimens, and for monitoring recommendations.

Patients must be tested for HCV RNA at least 12 weeks after completing treatment to determine outcome. Please notify the specialist below of the Week 12 post-treatment result.

**Declaration by General Practitioner**

I declare all of the information provided above is true and correct.

Signature: \_\_\_\_\_  
Name: \_\_\_\_\_  
Date: \_\_\_\_\_

**Approval by Specialist Experienced in the Treatment of HCV**

I agree with the decision to treat this person based on the information provided above.

Signature: \_\_\_\_\_  
Name: \_\_\_\_\_  
Date: \_\_\_\_\_

Once completed, please return both pages by email: \_\_\_\_\_ or fax: ( ) \_\_\_\_\_

Figure 1: National Remote Consultation Form

## Results

Total of 51 patients with active CHC infection identified and referred:

- 44 patients initiated on DAA treatment through GP/Specialist collaboration via RCF
- 1 patient yet to commence treatment and 1 patient with delayed treatment initiation (ITT: 88%)  
[3 patients treated via other services, 2 patients moved interstate]
- SVR12 achieved for 22 patients (50%)

Table 1: Baseline characteristics, treatment regimens and outcomes for patients initiated on DAA treatment using RCF

Total patients treated via RCF (between BBC & RAH)	N =44
<b>Demographics</b>	
Age, mean, years range	47.0 (29-65)
Male, n (%)	40 (91%)
Current Opiate Substitution Therapy (OST), n (%) Yes	25 (57%)
Current OST, n (%) No	19 (43%)
People Who Inject Drugs (PWID) past 6 months n (%) Yes	20 (45%)
PWID past 6 months n (%) No	24 (55%)
Unemployed or Disability Pension (Government)	39 (88%)
Community Corrections (parole/bail)	2 (5%)
Homeless	2 (5%)
Employed	1 (2%)
<b>Genotype, n (%)</b>	
1 a/b	22 (50%)
2	1 (2.5%)
3	20 (45%)
4	1 (2.5%)
AST-Platelet Ratio Index (APRI) <1, n (%)	41 (94%)
<b>Treatment Regimen *</b>	
Sofosbuvir/Ledipasvir 8 weeks	10 (22%)
Sofosbuvir/Ledipasvir 12 weeks	11 (25%)
Sofosbuvir & Ribavirin 12 weeks	1 (2%)
Sofosbuvir & Daclatasvir 12 weeks	21 (47%)
Elbasvir/Grazoprevir 12 weeks	2 (4%)
<b>Current Treatment Status **</b>	
Ceased early due adverse effects n (%)	2 (4%)
Currently on treatment or follow up n (%)	17 (37%)
Need or Lost follow-up n (%)	4 (9%)
SVR 12 n (%)	22 (50%)

\* 45 treatments approved 1 patient stopped early due to adverse event and retreated on different regimen.

\*\* 11 Delayed treatment starts by >3 months after been provided script for treatment.

## Conclusions

- Remote Consultation Form bridges the gap between GPs and Specialists
- This new MOC, whilst in its infancy, caters for those marginalised patients who are reluctant to engage with tertiary hospitals
- Further large-scale studies are needed to fully assess the efficacy of this new MOC

## References

- Australian Government, Department of Health, Pharmaceutical benefits Scheme, general statement for drugs for the treatment of Hepatitis C. March 2016. <http://www.pbs.gov.au/healthpro/explanatory-notes/general-statement-pdf/general-statement-hepatitis-c.pdf>
- Appendices -Australian recommendations for the management of hepatitis C virus infection: a consensus statement 2016. Available at: [www.hepcguidelines.org.au](http://www.hepcguidelines.org.au)