# The Development of a Collaborative Model to Optimise Hepatitis C (HCV) Antiviral Treatment in Community Drug Services

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## Background:

Approximately 90% of cases of HCV in London occur in past or current intravenous drug users (IVDUs), yet many of these clients do not attend secondary care for treatment. Successful HCV antiviral therapy requires innovative approaches to engage with these clients

The attrition in patient uptake from pre-test counselling for HCV, through testing, referral into care and successful antiviral treatment is well documented in the "cascade of care" for hepatitis C. Barriers within the patient pathway frequently relate to commissioning of testing and treatment; between need, funding and provision of testing, between testing and appropriate action over test results and between referral and uptake of treatment.

To overcome some of these barriers, we piloted a new collaboration between hospital and community services to deliver treatment locally to clients, based within Turning Point (TP), the provider of drug services in Croydon, in a hepatitis clinical nurse specialist (CNS) led clinic.

All clients accessing care at TP should be offered a BBV test, currently this is a dry blood spot test. Clients with positive HCV antibodies are referred to the HCV CNS clinic. The clinics operate on 2 days each week to offer flexible appointments for the clients. The CNS works closely with the BBV nurse and the recovery workers to continuously encourage and support the clients to attend appointments.
Opioid substitution therapy (OST) prescription dates are amended to co-ordinate to encourage attendance of appointments and collection of HCV medication.
The initial assessment includes a full liver assessment including a fibroscan, clients with advanced fibrosis and cirrhosis are offered routine liver care with ultrasound or MRI and endoscopy alongside HCV treatment. Support is provided to enable the client to access this care at SGUH.

During treatment, clients are followed up regularly to ensure they are tolerating and taking the medication. The BBV nurse has regular communication with the CNS in between clinics. Blood tests are only taken when necessary.

An assessment is made to decide when a client is ready to start treatment, however, this chaotic population may not always start treatment as planned. The medicines returns policy mitigates the financial risk as medicines can be returned and reused. It also ensure that the client has the opportunity to be treated in the future.

## Model of Care

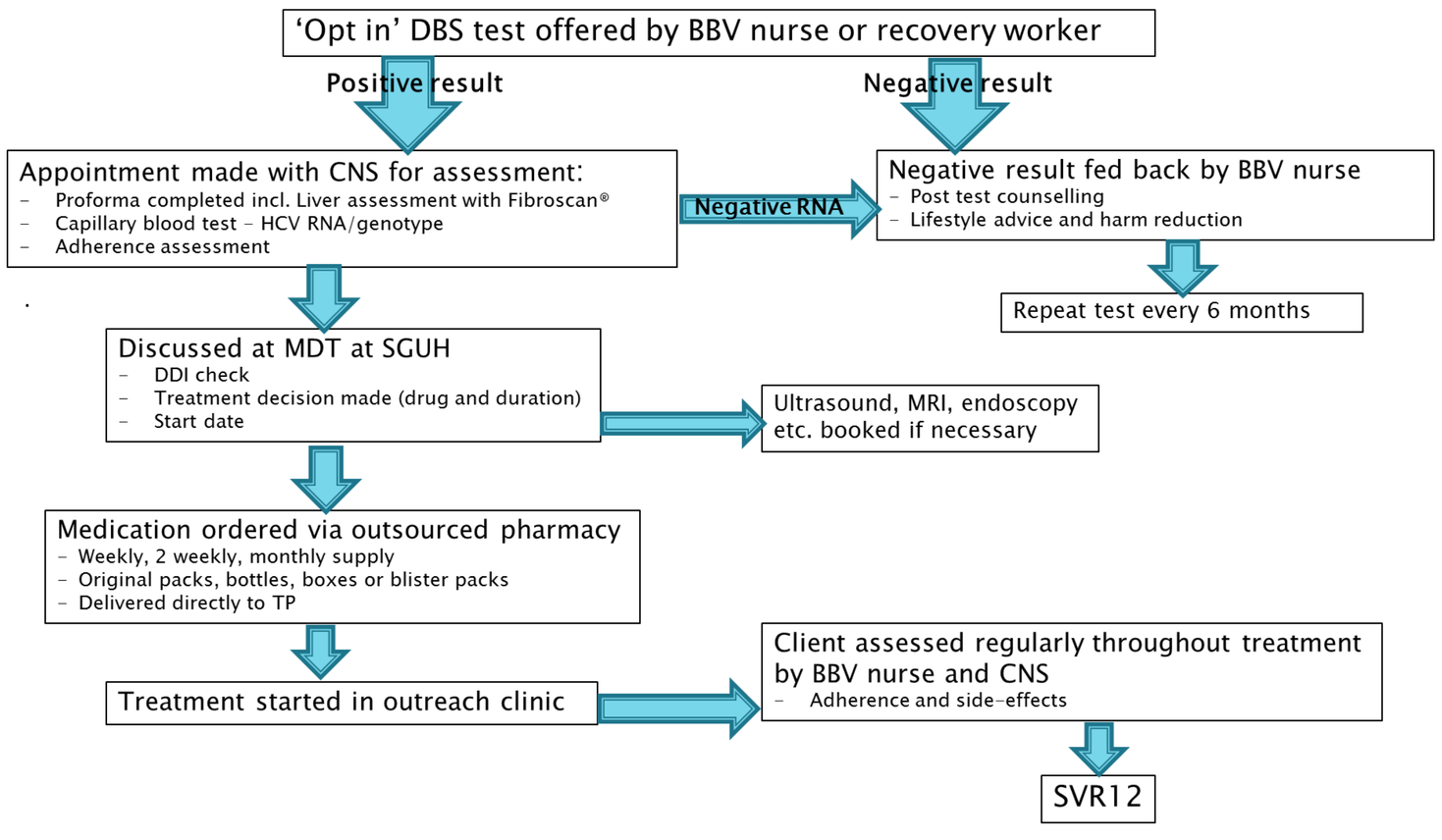


**Figure 1:** Model of care for delivery of HCV antiviral therapy in a community based drug service. Abbreviations: DBS = dried blood spot; BBV = blood borne virus; CNS = clinical nurse specialist; MDT = multidisciplinary team; SGUH = St. George's University hospital.

## Results:

| | No. Clients |
|---|---|
| Referred to CNS clinic | 65 |
| Positive HCV antibody and assessment | 60 |
| Positive HCV RNA and discussed at MDT | 48 |
| Treatment started | 36 |
| Starting treatment | 5 |
| Disengaged post assessment | 4 |
| Not ready to start treatment | 3 |

**Table 1:** Numbers of clients referred, assessed and treated for HCV.

| Status of HCV Treatment | No. Clients |
|---|---|
| Completed treatment | 26 |
| Did not complete treatment | 4 |
| Achieved SVR EOT | 28 |
| Stopped treatment due to adverse effects | 3 |
| Relapsed post treatment | 1 |
| Disengaged during treatment | 1 |

**Table 2:** HCV treatment outcomes

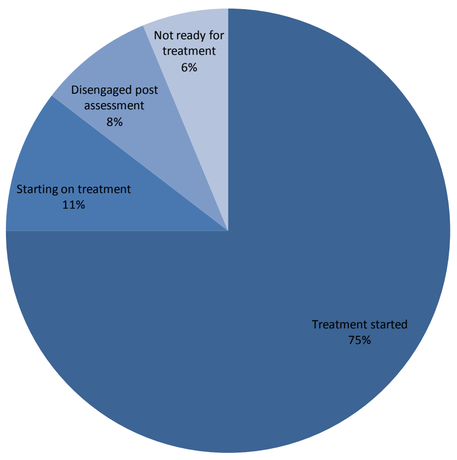


**Figure 1:** Initiating HCV treatment

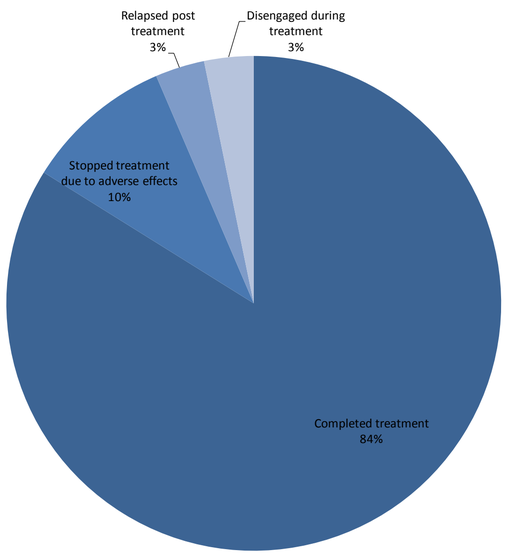


**Figure 2:** HCV treatment outcomes

Currently, sixty five patients have been referred to the HCV clinic at TP, with over 90% of these (n=60) being assessed. All 48 clients with a positive HCV RNA have been discussed at the MDT and a treatment decision has been made. Not all clients are suitable for treatment immediately, this decision is made in collaboration with the recovery worker, CNS, MDT and the client.

The majority (75%) of clients have started treatment and 84% of these have successfully completed treatment with a 96% SVR at end of treatment.

Four clients did not complete treatment. One disengaged and three stopped due to adverse effects of diarrhoea and mood disturbances, these may not be related to HCV treatment. However all three have achieved SVR despite not completing treatment.

Although, four clients disengaged with TP following their assessment, two of them have now been identified in another drug service in our area and have now started HCV treatment.

## Discussion:

This initiative demonstrates effective collaborative working between hospital and community to deliver treatment and care to clients in a safe and effective way, in an environment they are familiar with.

The proactive, engaged attitude of the BBV nurse working within TP has been vital in the success of this project. They are responsible for identifying and scheduling clients into appointments and then working closely with the CNS and the recovery workers to arrange follow up at a time which suits the client.

A non-judgemental, proactive and supportive approach from the whole team has enabled us to overcome the perceived barriers to treatment for a difficult to reach population.

Engaging and educating these clients empowers them to achieve viral clearance and promote the service themselves to their peers. Although there are minimal restrictions for HCV treatment with regards to drug taking and alcohol consumption, health promotion and harm reduction is discussed throughout and following treatment.

The current model of care involves an 'opt in' dry blood spot test for HCV antibodies, this results in clients being referred without a positive HCV RNA. In collaboration with SGUH, South West London Pathology have developed a capillary blood test (CBT) to screen for Hep B, HIV and Hep C and includes a HCV RNA. All positive samples undergo reflex genotyping with a turnaround of 4 days. Removing the need for an additional visit for a confirmatory test in the treatment pathway helps to keep the patient motivated to start treatment. The quick turnaround time also enables a faster treatment decision meaning that treatment can be started within a week.

## Next Steps:

This successful model of care will be replicated in other drug and alcohol centres in our area. Strong communication links will be built between these services to enable clients to be identified if they move to a new area.

Unfortunately, levels of BBV testing remain low and many clients remain undiagnosed. TP currently operates an 'opt in' testing service however 'opt out' testing with a CBT is the gold standard that we are striving for. The engagement of the key workers is essential to ensure that all of their clients are tested and retested routinely. Training and education is required to promote testing. The joint working of the CNS and the BBV nurse is invaluable to encourage and monitor rates of testing within the service.

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