



## **B-Elim**

### **BBV Outreach Testing and Support Report**

#### **Funded by:**

**University Hospitals Tees,  
Centre for Clinical Infection**

**Programme: BBV Testing and Support  
January 2022-2026**

## 1. Outcomes Summary

### **i. Background and Strategic Context**

The University Hospitals Tees funded this programme, Centre for Clinical Infection, to deliver targeted Blood Borne Virus (BBV) testing and support within community and outreach settings. The work was explicitly aligned with progress towards the **National Hepatitis C Elimination Strategy**, which commits England to eliminating Hepatitis C as a public health threat through expanded testing, early diagnosis, and rapid linkage to treatment.

National policy places particular emphasis on reaching populations who are not routinely engaged with mainstream health services, including people experiencing homelessness, housing instability, or social exclusion. While individuals engaged in community drug treatment services should already receive regular BBV testing through established clinical pathways, evidence indicates that those outside these services remain at higher risk of undiagnosed infection. This project therefore prioritized outreach testing for individuals **not currently engaged with community drug services**, addressing a recognized gap in BBV case-finding.

In addition to Hepatitis C, the programme incorporated routine testing for **HIV and Hepatitis B**, with **Syphilis testing** included aligning with local Emergency Department BBV testing pilots. This ensured consistency across acute and community pathways and supported a system-wide approach to BBV identification.

Testing was delivered in supported housing, emergency accommodation, community charity venues, and through home visits, enabling access for people experiencing homelessness, housing instability, substance use, mental ill-health, and social exclusion. The model prioritized **frequent venue-based presence**, rapid communication of results, and immediate clinical follow-up, reducing loss to follow-up and supporting engagement at the point of readiness.

## ii. Aims and Objectives

The primary objectives of the funded work were to:

- Increase access to BBV testing for individuals not engaged in community drug treatment services.
- Contribute to local and national Hepatitis C elimination efforts through improved case-finding.
- Provide integrated testing for Hepatitis, HIV, Hepatitis B, and Syphilis
- Align community outreach testing with local Emergency Department BBV testing pilots.
- Deliver testing in trusted, accessible non-clinical environments.

## iii. Health and Clinical Outcomes

The programme enabled access to testing for **Hepatitis C, Hepatitis B, HIV, and Syphilis** in non-clinical environments. Where BBV infection was identified or suspected, individuals were supported into specialist assessment and treatment pathways through hospital and community services, including rapid telephone clinical assessment and medication delivery.

The model supported earlier diagnosis and treatment initiation, reducing the risk of late diagnosis and onward transmission. Individuals were also supported to engage with primary care, community nursing, and hospital services, addressing barriers linked to GP access, transport, and appointment attendance.

## iv. Prevention, Harm Reduction, and Engagement

Alongside testing, individuals received tailored harm minimization advice linked to their patterns of substance use, including safer injecting and safer use guidance. Harm reduction resources were provided where appropriate, reducing immediate risk while supporting longer-term engagement.

Importantly, the programme improved awareness of BBV risk among people who do not perceive themselves to be at risk, particularly **cocaine and crack cocaine users** who are less likely to be engaged with structured drug treatment services and therefore less likely to receive routine BBV testing.

#### **v. System Integration and Partnership Working**

The programme strengthened alignment between **hospital-led services, Emergency Department BBV testing pilots, and community outreach provision**, supporting a coherent system response rather than parallel or duplicated activity.

Delivery was underpinned by partnership working with **the Hepatitis Trust, the Hartlepool and Stockton Health Primary Care Outreach Team, CGL, and Stockton-on-Tees Borough Council Safeguarding**. These relationships supported shared problem-solving, safe practice, continuity of care, and flexible responses to disruption caused by housing instability or custodial transitions.

#### **vi. Wider Wellbeing and Stability**

Recognizing the interaction between health outcomes and wider social determinants, the programme provided practical support alongside clinical interventions, including support with housing advice, employability, transport, food, toiletries, and essential items for people experiencing homelessness. These interventions were integral to sustaining engagement with health services and treatment completion.

## 2. Alignment with ICS and UKHSA Priority Domains

### **Population Health and Prevention**

The programme contributed directly to **national Hepatitis C elimination objectives** by improving early identification of BBVs in populations, most likely to be missed by routine testing pathways. Through frequent outreach testing, rapid test-to-treat pathways, and harm reduction, the programme reduced the risk of onward transmission and supported prevention at both individual and population levels.

Integrated testing for Hepatitis C, Hepatitis B, HIV, and Syphilis maximized the public health impact of each contact, ensuring opportunities for prevention were not missed.

### **Tackling Health Inequalities**

The outreach model explicitly addressed health inequalities by prioritizing individuals experiencing homelessness, housing instability, substance use, and disengagement from mainstream services. Delivery in trusted, non-clinical settings reduced barriers linked to stigma, mistrust, transport, and previous negative experiences of healthcare.

Support with GP access, primary care engagement, and mental health support reduced structural barriers and supported equitable access to care.

### **Integrated Care and Place-Based Working**

The programme demonstrated effective **place-based delivery**, strengthening coordination between acute hospital services, Emergency Department testing pilots, community outreach, voluntary sector partners, and local authority services.

This integrated approach improved continuity across testing, diagnosis, referral, treatment, and wider support, and reduced duplication by complementing existing drug treatment and healthcare pathways rather than replicating them.

## Multiple and Complex Needs

The programme responded to the intersection of **substance use, mental ill-health, physical health, housing instability, and safeguarding concerns**, delivering whole person care rather than single-issue intervention.

By embedding flexibility, persistence, and relationship-based engagement into delivery, the model demonstrated that individuals with complex and chaotic lives can successfully complete treatment when systems adapt to lived realities.

## 3. Introduction and Strategic Context

This programme was funded to deliver targeted BBV testing and support within community and outreach settings, explicitly aligned with progress towards the National Hepatitis C Elimination agenda. National elimination depends on expanded testing, rapid linkage to treatment, and sustained focus on populations less likely to engage with mainstream healthcare.

The programme prioritized individuals who are **not engaged with community drug treatment services**, recognizing that those in structured treatment are already tested regularly or should be through established pathways. The outreach approach therefore focused on those most likely to be missed and most likely to have undiagnosed infection.

In addition to Hepatitis C, the programme incorporated routine testing for **HIV and Hepatitis B**, with **Syphilis testing** included at standard testing periods to align with local Emergency Department BBV testing pilots and support system-wide pathway consistency.

## **4. Blood Borne Viruses: Definitions**

### **Hepatitis C Virus (HCV)**

Hepatitis C is a blood-borne virus that primarily infects the liver. Infection may be asymptomatic and can progress to chronic infection, increasing the risk of cirrhosis and liver cancer if untreated. There is no vaccine; however, modern antiviral treatments can cure the majority of infections, supporting elimination objectives.

### **Hepatitis B Virus (HBV)**

Hepatitis B is a blood-borne viral infection of the liver transmitted through blood and bodily fluids. It is vaccine preventable. Chronic infection can lead to serious liver disease without appropriate monitoring and treatment.

### **Human Immunodeficiency Virus (HIV)**

HIV attacks the immune system. Effective antiretroviral therapy enables people to live well and prevents onward transmission when viral load is suppressed. Early diagnosis remains central to public health control.

### **Syphilis**

Syphilis is a bacterial sexually transmitted infection that can cause significant harm if untreated but is fully treatable with antibiotics. Integration alongside BBV testing supports broader infection control and early intervention.

## **5. Risk Context: Drug Use, Cocaine/Crack Use, and High-Risk Housing Settings**

### **Hepatitis C and Drug Use**

Hepatitis C remains strongly associated with drug use, particularly injecting drug use, due to blood-to-blood transmission. Individuals outside community drug services are less likely to receive routine testing and therefore more likely to have undiagnosed infection and to experience delayed treatment.

### **Risks for Cocaine and Crack Cocaine Users**

Hepatitis C risk is not limited to injecting. Among people who snort cocaine, risk is increased through sharing of nasal inhalation equipment and mucosal damage and bleeding. Crack cocaine use can also increase risk through sharing pipes or makeshift smoking equipment, burns or cuts, and indirect blood contamination. Stimulant use is associated with high-frequency patterns of consumption and reduced risk perception. Many individuals do not see themselves as “at risk” if they do not inject, making outreach testing particularly important.

### **Risks in Supported Housing, Hostels, and HMOs**

Supported housing, hostels, HMOs, and emergency accommodation can be higher-risk environments due to concentration of vulnerability rather than the accommodation itself. Risk factors include communal living, limited privacy, high turnover, unstable routines, and reduced engagement with mainstream healthcare. These settings remain critical for elimination case-finding as residual infection becomes increasingly concentrated in underserved populations.

## 6. Outreach Model: High Intensity Test and Treat (HITT)

Testing in venues was delivered through a **High Intensity Test and Treat (HITT)** approach, characterized by frequent engagement and repeat presence to maximize opportunities for testing, linkage to care, and treatment completion.

Key delivery features included:

- Frequent visits to venues, building familiarity and trust.
- **Three-monthly screening events** at each venue
- Results provided by the tester
- Telephone assessments were arranged immediately where needed.
- Assessment completed rapidly, including within **24 hours** of lab result as the quickest achieved.
- Medication arranged to be delivered
- Ongoing support throughout treatment

This model reduced delays, reduced loss to follow-up, and enabled treatment initiation when individuals were ready and accessible.

## **7. Venues and Delivery Settings**

### **Outreach Testing Provided at:**

#### **Supported housing in Stockton.**

- Turnaround Homes, Leybourne Terrace, Stockton
- New Walk, Hartington Road, Stockton
- Bridge House, Bridge Road Stockton
- Fresh Start, Portrack Lane, Stockton
- Fresh Start, Yarm Road, Stockton
- Fresh Start, Westbourne Terrace, Stockton

#### **Community charities in Stockton**

- Moses Project, Alma Street, Stockton
- Rivers of Life, Bowesfield Lane, Stockton
- Salvation Army, Palmerston Street Stockton

#### **Emergency accommodation**

- Metro Inn, Stockton (emergency accommodation used by various local authorities in the Northeast)
- Mayo Hotel, Stockton

#### **Additional delivery**

- Home visits

## **8. Alignment with Wider Pathways and Partnership Working**

The programme was coordinated to align with local Emergency Department BBV testing pilots, supporting consistent testing intervals and clear clinical pathways across acute and community settings.

In addition to the hospital team and the venues the programme worked on, it worked closely with **The Hepatitis C Trust**, the **Hartlepool and Stockton Health Primary Care Outreach Team**, **CGL**, and **SBC Safeguarding**. This partnership approach strengthened system integration, reduced duplication, supported safe delivery in complex environments, and enhanced continuity of care for individuals experiencing instability or transition.

## **9. Testing and Information – Outcomes**

### **BBV Testing, Information, and Harm Reduction**

The programme enabled individuals to access testing for Hepatitis C, Hepatitis B, and HIV, including repeat testing where clinically appropriate. Alongside testing, individuals received harm minimization advice tailored to patterns of substance use, including safer injecting and safer use guidance. Harm reduction packs were provided where needed to reduce immediate transmission risk and related harm.

Where BBV infection was identified or suspected, individuals were supported with referral into specialist pathways, including onward referral into Centre for Clinical Infection and hospital pathways for assessment and treatment initiation.

In addition to service users, staff working within partner organizations were supported to access BBV testing and information, contributing to workforce health and infection prevention.

## **Mental Health and Emotional Wellbeing**

The programme supported access to both secondary and primary mental health services. This included facilitated referrals to TEWV pathways and support to access primary mental health services, including local psychological therapy providers. In some cases, guidance and advocacy enabled re-engagement with mental health services and access to appropriate treatment. Where statutory provision did not meet needs, individuals were supported to explore private CBT therapy.

## **Nursing, Primary Care, and Unmet Health Needs**

Individuals were supported to engage with community nursing provision, including specialist nurse access for complex or unmet health needs. Support was also provided to enable access to GP services, blood tests, and prescribed medication, addressing barriers to routine healthcare engagement.

## **Practical, Social, and Welfare Support**

Practical support included assistance with transport, including support to secure free disability bus passes through Stockton Council, enabling improved access to services and appointments.

Individuals were supported with employability-related activity through local employment hubs. Housing advice and guidance were provided, including engagement with housing options in Stockton and neighboring areas.

## **Substance Use Support and Recovery Pathways**

Where appropriate, individuals were supported to engage with drug and alcohol services, ensuring clear pathways into structured support while maintaining focus on individuals outside routine testing pathways.

## Support for People Experiencing Homelessness

For individuals experiencing homelessness or severe housing insecurity, the programme provided immediate practical support including sleeping equipment, bedding, food and toiletries, supporting stabilization and engagement.

### 10. Partnership Impact Summary

- Expanded access to BBV testing for individuals **not routinely engaged with community drug treatment services**, addressing gaps in standard testing pathways.
- Increased identification of previously undiagnosed BBV infection through targeted outreach in supported housing, emergency accommodation, community charity settings, and via home visits.
- Supported earlier engagement with clinical pathways for Hepatitis C, Hepatitis B, and HIV, reducing the risk of late diagnosis and onward transmission.
- Strengthened alignment between hospital-led services, Emergency Department BBV testing pilots, and community outreach provision, improving system coherence and continuity of care.
- Enhanced engagement and trust through partnership working with The Hepatitis C Trust, supporting peer-informed conversations and improved readiness for treatment.
- Improved access to primary care registration and follow-up through joint working with the Hartlepool and Stockton Health Primary Care Outreach Team, particularly for individuals facing barriers to mainstream services.
- Ensured effective coordination with CGL to avoid duplication and maintain a clear focus on individuals outside routine treatment and testing pathways.
- Maintained robust safeguarding practice through ongoing liaison with SBC Safeguarding, supporting safe delivery in complex and high-risk environments.
- Contributed directly to national Hepatitis C elimination objectives by focusing on populations and settings where residual infection is most likely to persist as overall prevalence declines.

## **11. Case Studies: Supporting Engagement and Treatment Completion**

The following anonymized case studies illustrate how rapid outreach response, partnership working, and practical support enabled individuals with long-standing Hepatitis C infection and complex needs to successfully complete treatment and achieve sustained virological response (SVR). They demonstrate how flexible, high-intensity delivery can overcome barriers linked to housing instability, substance use, and system disengagement.

### **Case Study 1: Male – Long-Term Untreated Hepatitis and Housing Instability**

This individual had been known to be Hepatitis C positive for over a decade. During this period, he had been assessed and prescribed treatment on multiple occasions but had never commenced therapy. Barriers to treatment included reluctance to engage, lack of stable accommodation, and repeated assessments conducted while in prison. Short custodial sentences meant he was frequently released before treatment could be initiated, resulting in repeated missed opportunities for cure.

When the individual accessed the outreach service, a rapid response was possible, and treatment was initiated within 24 hours. Weekly visits to his supported housing placement provided consistent encouragement, monitoring, and practical support. Partnership working with CGL was critical; when the individual was subsequently evicted, coordinated action ensured that his medication was not destroyed and could be safely returned to him.

Despite ongoing housing instability and a history of non-initiation, the individual successfully completed treatment and achieved sustained virological response (SVR). This case highlights the importance of speed, flexibility, and cross-service coordination in supporting individuals with long-standing untreated infection.

## **Case Study 2: Female – Long-Term Substance Use and Complex Health Needs**

This individual had a long history of substance use, multiple deprivations, and complex physical health needs. She had previously been prescribed Hepatitis C treatment but had not completed it due to difficulties with adherence, competing priorities, and instability linked to poor health and social circumstances.

Through the outreach programme, weekly support was provided, including food vouchers to reduce immediate financial pressure and instability. Adherence was further supported through regular contact with the Health and Social Housing (H&SH) nursing team during wound care appointments, allowing treatment support to be embedded into existing healthcare interactions rather than relying on additional appointments.

This coordinated, low-threshold, and relationship-based approach enabled the individual to complete treatment successfully and achieve SVR, despite previous non-completion and ongoing complexity.

## **Case Study 3: Male – Homelessness and Engagement Challenges**

This individual experienced frequent homelessness and periods in temporary accommodation, which had previously prevented consistent engagement with Hepatitis C treatment. Maintaining routine and adherence was a significant challenge due to instability and lack of structure.

The outreach model enabled weekly appointments, supplemented by regular prompts and encouragement from a safeguarding worker and staff at the Moses Project, where the individual accessed support. On most weekdays, he received reminders to take medication, providing continuity and reinforcement during treatment.

With this combined support from outreach, safeguarding, and community charity staff, the individual was able to complete treatment and achieved sustained virological response (SVR).

## **Case Study 4: Female – Multiple Previous Treatment Attempts in Supported Housing**

This individual lived in supported housing and had made several previous attempts to complete Hepatitis C treatment without success. Challenges included fluctuating engagement, competing needs, and difficulty maintaining adherence over time.

Through weekly outreach contact, combined with practical support such as groceries and close involvement from the Health and Social Housing nursing team, the individual was supported through the full course of treatment. The consistent presence of trusted staff, practical assistance, and flexible response to setbacks reduced barriers and enabled sustained engagement.

She successfully completed treatment and achieved sustained virological response (SVR).

### **Learning from Case Studies**

These case studies demonstrate that successful Hepatitis C treatment among individuals with complex needs is less dependent on clinical complexity and more dependent on:

- Speed of treatment initiation
- Flexible, outreach-based delivery
- Practical and material support
- Strong partnership working across health, substance use, housing, safeguarding, and community services.
- Persistence and relationship-based engagement

They reinforce the conclusion that housing instability, substance use, and previous non-completion do not preclude cure when systems adapt to lived realities and take shared responsibility for adherence and continuity of care.

## **12. Value Added Beyond Testing**

While BBV testing formed the core of the programme, its impact extended significantly beyond testing activity alone. The outreach model created opportunities to identify and respond to unmet health and social needs that would not have been addressed through single-issue clinical intervention.

By combining BBV testing with harm reduction, mental health engagement, primary care access, housing advice, employability support, and practical assistance, the programme supported whole-person care. This improved engagement, reduced barriers, and enabled treatment completion for individuals who had historically been unable to complete therapy.

As Hepatitis C prevalence continues to decline, elimination increasingly depends on reaching smaller, higher-risk populations with complex needs. This programme demonstrates how integrated outreach can deliver disproportionate public health value by addressing the intersection of infection risk, inequality, and system exclusion.

## **13. Conclusion and Next Steps**

As national prevalence declines, elimination increasingly depends on reaching people with complex lives, unstable housing, and disrupted engagement with services. This programme demonstrates that with high-intensity outreach presence, rapid test-to-treat response, flexible medication delivery, and strong partnership working, individuals experiencing homelessness, substance use, and instability can successfully complete treatment and achieve cure.

## **14. Acknowledgements**

This programme was delivered through strong partnership working across health, local authority, voluntary, and community sectors. We would like to formally acknowledge and thank the organisations and teams whose collaboration, flexibility, and commitment were central to the success of this work.

We are grateful to **University Hospitals Tees** and the **Centre for Clinical Infection** for funding, clinical leadership, and ongoing support, and for enabling a flexible outreach model aligned with national elimination priorities.

We would like to thank the **hospital BBV and clinical teams** for their responsiveness, rapid assessment processes, and commitment to test-and-treat principles, which enabled timely initiation of treatment for individuals with complex needs.

Our thanks extend to **The Hepatitis C Trust** for peer-informed support, expertise in engagement, and contribution to readiness for treatment among individuals with long histories of non-initiation or disengagement.

We are grateful to the **Hartlepool and Stockton Health Primary Care Outreach Team** for their partnership in supporting access to primary care, blood tests, and continuity of care for individuals facing significant barriers to mainstream services.

We thank **CGL** for close collaboration, information sharing, and practical support that ensured continuity of medication and care during periods of housing instability, eviction, and transition.

We acknowledge **Stockton-on-Tees Borough Council Safeguarding** for guidance, support, and oversight that enabled safe delivery within complex environments and ensured appropriate responses to risk.

We also wish to thank the staff and residents of the supported housing providers, emergency accommodation, and community

charities who hosted outreach testing sessions, facilitated engagement, and supported individuals throughout testing and treatment.

Finally, we acknowledge the individuals who engaged with the programme. Their trust, persistence, and willingness to engage often in the context of significant instability made this work possible and continue to inform learning for future elimination efforts.



A grey rectangular box containing a handwritten signature in black ink that reads 'Liam Knowles'.

Liam Knowles  
Project Delivery

