



September 2018

Project Title: The Three Bridges Project

Keywords: Hepatitis C, Testing, Police Custody, Hard to reach, Engagement, Health Inequalities.

Duration of project: 14 months

Date of submission: 21st September

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Project Team: Sara Lamond, Jessica Davidson, Jacky Shaw, Mark Quilietti-Bird, Lynn Paton (Gemma Roberts moved to new post).

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Summary:

The Three Bridges Project is funded by the Queens Nursing Institute for Scotland as part of their Catalysts for change programme 2017-2018. The main aim of this project is to provide opportunistic testing for Hepatitis C to detainees in Police Custody in Edinburgh. People who are at risk of contracting Hepatitis C are often a marginalised and vulnerable group due to homelessness, mental health problems, injecting drug use, engage in sex work or come from a minority ethnic group. They can often face significant health issues due to lack of engaging with mainstream services. They can find the barriers hard to navigate and therefore often have huge unmet health needs. This project provides resources from a team of nurse specialists based in both Hospital and Community settings to support the Police custody nursing team to identify, assess, and deliver Hepatitis C testing and referral to treatment to the most high risk and vulnerable patients. The project will reduce losses and missed opportunities for the testing, care and treatment of Blood Borne Viruses mainly Hepatitis C.

Through effective engagement we aim to make every contact count by delivering a range of Harm Reduction Interventions to ensure we meet the outcomes of the Scottish Governments Sexual Health and BBV Framework. The framework outcomes include reducing newly acquired blood borne viruses, those affected by blood borne viruses lead longer, healthier lives and attitudes towards blood borne viruses are positive and non-stigmatising. ⁱ

Background:

The prevalence of Hepatitis C in the Scottish population is 1%, 90% of those infected with Hepatitis C Virus acquired their infection through injecting drug use behaviour through sharing injecting paraphernalia. Furthermore in Scotland more than two thirds of people with Hepatitis C remain undiagnosed.ⁱⁱ Data from the NESI study 2008-09 to 2015-16 (needle exchange surveillance initiative) indicates that the prevalence of Hepatitis C in people who inject drugs has increased to 58% in 2016.ⁱⁱⁱ A study carried out showed the prevalence of Hepatitis C within Scottish prisons is up to 19%^{iv}. Patients in police custody are often not registered with a GP and avoid healthcare interactions but are suffering from the burdens of illness without treatment. Being in Police custody allows people to access nursing care and therefore it is an obvious setting to deliver Blood Borne Virus (BBV) care given the prevalence of injecting drug use amongst people in police custody.

Hepatitis C has been labelled a silent killer and most patients don't experience any symptoms after infection, this enables the infection to go undiagnosed which can cause serious damage to the liver and allows the virus to be transmitted to others. This has led to viral hepatitis becoming one of leading cause of death worldwide and a huge public health burden.^v In 2004 Scotland's Health Minister declared that "Hepatitis C is one of the most serious and significant public health burdens of our generation".^{vi}

NHS Lothian has a well-established Blood Borne Virus service within both primary and secondary care which includes in reach and outreach clinics within the Community, Prisons, Drug Treatment and Testing Orders (DTTO) and Alcohol and Drug services. It is a natural progression to include the Forensic Nursing Team to develop the BBV Care pathway to extend access to patients who are hard to reach and often find it challenging engaging in traditional healthcare settings. We know that the majority of patients infected with HCV in Scotland are people who inject drugs and due to their chaotic lifestyle can struggle to engage with services for testing, diagnosis and treatment. This means missed opportunities to diagnose, treat and raise awareness of how to prevent Blood Borne Viruses. The Three Bridges project aims to reduce barriers for patients by linking services together so patients can access BBV care easily.

RIDU WGH



Police Custody Suite



As nurses we are in a unique position to improve the quality of care for people at risk or living with Hepatitis C through better awareness, prevention, increased testing, diagnosis and access to treatment. We have a great opportunity with the Three Bridges project to work towards the elimination of Hepatitis C by 2030. The Scottish Government and NHS Lothian Viral Hepatitis Managed Care network and are committed through the BBV and Sexual health framework to eliminate Hepatitis C as a public health concern.

We recognise that our patient group are often marginalised and have unmet health needs in relation to HCV. Our project team can out to the “hard to reach groups”, identifying those at risk, offering Blood Borne virus testing and engaging patients in a meaningful way in the care pathway.

We are aware that we have a group of patients who are “lost to follow up” which means that they did not engage with specialist treatment at the time of diagnosis. We know that early detection and treatment saves lives meaning better outcomes. We hope using instant testing techniques and direct referrals into treatment will mean a higher level of engagement for those who have not accessed traditional healthcare services.

As there is no vaccine for Hepatitis C, prevention of infection depends on reducing the risk of exposure to the virus. The Three Bridges nurses are best placed to offer education around the prevention of BBV’s as part of their holistic care of the patient. This opportunity can be used to discuss a range of harm reduction measures including signposting to other services for needle exchange, hepatitis B vaccination, alcohol brief intervention etc.

Our aim is to embed BBV testing as part of a package of care provided primarily by the clinical forensic nurses. Working in such a way means patients who are most at risk of BBV’s will be identified early and referred to specialist services. Ultimately this project completes the care pathway for those entering into criminal justice services and works in collaboration with clinics in HMP’s and DTTO services (Drug treatment and testing Orders).

This model of care focuses on collaboration and integration of nursing teams both in primary and secondary care. Providing seamless care to patients who enter into the custody suite aiming to identify the undiagnosed population ,reduce patients lost to follow up, increase the number of patients commencing HCV therapy , increasing knowledge of blood borne viruses and how to prevent onward transmission .

Bringing three different nursing teams together in this way ensures every element of the care pathway is covered by highly trained nursing staff.

The Aim:

- To identify those at risk of Blood Borne Viruses.
- To introduce Blood Borne Virus screening using instant testing technologies at the Forensic Nursing Suite (Test 100 people)
- To re engage with patients who have been lost to follow since their diagnosis.
- To develop the Blood Borne Virus care pathway across criminal justice services.
- To raise awareness of Blood Borne viruses amongst hard to reach groups.
- To deliver Blood Borne Virus prevention information to reduce onward transmission.
- To inform patients about new Hepatitis C Treatments.

The Project:

To Provide an-opt out testing system with instant results for Hepatitis C Virus for those identified “at risk” within Police custody in Edinburgh. There are a substantial number of people that drop out of the care pathway from testing, diagnosis, assessment, treatment, referral and completion of treatment. Working collaboratively with police custody nurses, community nurses and hospital nurses we can identify and support those most at risk and in need of Blood Borne Virus intervention through the patient pathway. The overall aim is to reduce health inequalities and help these disenfranchised patients into meaningful healthcare by simplifying the care pathway and making it easier to access BBV testing.

Planning: how did we do it

Our aim was to bring three nursing teams together (Forensic Nurses, BBV Treatment nurses and the Community BBV Team) to provide BBV awareness/prevention, Testing and Treatment for primarily Hepatitis C but all Blood Borne Viruses were screened for. As these services have never worked together in a formal capacity before we met several times to discuss and develop a project plan. The meetings were used as an opportunity to be creative, develop relationships, identify any possible barriers and to find solutions.

The project required us to develop new pathways, clinical paperwork, set up new systems in line with clinical governance and to build new working relationships. This meant we got the opportunity to share best practice across the three teams and understanding and appreciating our different roles.

Ethical Considerations:

We presented the project and outlined our aims to the QIT (Quality Improvement Team), this was a useful process and the wider team expressed interest and curiosity in terms of delivering healthcare in this unique environment. The group raised some issues we hadn't considered which were very helpful in terms of ensuring our work would link in and be accessed across laboratory systems.

We took relevant ethical considerations to the Project Sponsors and Public Health Consultant and it was agreed that our project was a service development and therefore it was not necessary to submit an application to the ethics committee. Provisions regarding consent and capacity to test already existed within current practice.

Training:

To ensure the forensic nurses could deliver the service competently and felt supported they attend a training session on how to use the Oraquick tests, this was in addition to them having already completed a one day Dried Blood Spot (DBST) training course. Further training including shadowing the Treatment Nurses and the Community BBV nurses in both hospital and outreach clinic settings and completing the BBV e learning module. We also delivered ten 1:1 training sessions with the forensic nurses.

We acknowledged that due to the shift pattern and lone working element of the forensic nurse's work that it was best that a BBV Champion was identified within the team. It is recommended for areas such as prisons and immigration removal centres that healthcare services should designate a member of staff as the hepatitis lead. ^{vii}The lead should have the knowledge and skills to promote Hepatitis testing and treatment. A BBV champion was identified and trained to sign off competencies and lead the implementation of the project within the custody suite supported by senior managers. We developed a care pathway which set out the logistics of operating the service in terms of clinical governance.

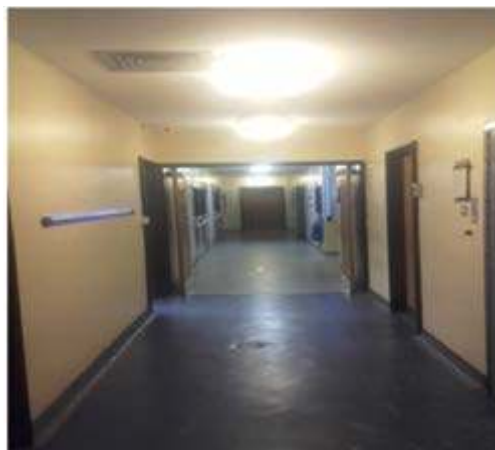
Training event at St. Leonards Police Custody Suite



BBV Clinic Consultation



Police Custody Suite



Results:

| | |
|--|---|
| Number of patients seen | 5 |
| Number of patients tested | 2 |
| Number of patients lost to follow up | 3 |
| Number of patients engaged in care | 4 |
| Number of patients in assessment for Treatment | 1 |
| Number of patients completed HCV Treatment | 1 |
| Number of patients received Harm reduction advice, Prevention of onward transmission, signposted to other services | 5 |

Overall Challenges:

Difficult to deliver training, assess competencies and get overall “buy in” from forensic nurses due to shift patterns and the lone working nature of their roles.

Hard to build relationships with staff when working remotely, staff not being able to voice concerns face to face. Most communication occurred by email.

Capacity in nursing teams was affected by staff sickness

Keeping staff motivated as it took a long time to develop processes, pathways, organise logistical and operational issues such as blood sample pick -ups, storing blood samples in non NHS buildings, ordering equipment.

Difficult to sign off staff as competent whilst on shift as either the shift was too busy to do training or too quiet and therefore no patients to test.

How we overcame these challenges:

Following the team training session we ran ten 1:1 sessions with staff. These were very helpful as it gave us an opportunity to hear staffs opinion of the project and really understand how they felt it would fit into their work. We used these sessions to build relationships and staff confidence around testing .The sessions offered the BBV nurses an opportunity to give perspective and emphasise how important delivering BBV testing is in this environment and the impact it will have on those patients who are most at risk.

As the project was progressing very slowly we identified a BBV Champion- this person brought a lot of energy and enthusiasm to the project. She worked closely with the project lead to progress the development of the risk assessments, SOPs (standard operating procedures), Clinical letter templates, coding systems with the virology lab, ordering equipment.

The champion will take on the role of signing the clinical competencies for the rest of the nursing team meaning staff will be available on each shift to deliver BBV testing.

Successes:

As the project has progressed, so too has our relationships. Ultimately this new group of nurses working together means improved communication networks.

It has meant that patients have access to care they would not have engaged with in any other setting.

Responses to referrals is faster using our project email meaning better patient engagement.

Staff knowledge and understanding of Blood Borne Viruses has increased.

When nursing staff are working out of hours they have a timetable of clinics they can signpost patients to for assessment by the BBV nurses.

Staff Feedback/ Referrals:

CFN: Thanks so much for following this patient up regarding his Hepatitis C treatment, if it wasn't for sitting in on your clinic yesterday I wouldn't had the confidence and knowledge to raise the issue with patient.

CFN: This patient knows he is hepatitis C positive but has not done nothing about it for years. I mentioned that we can refer him directly into treatment services and that the new treatments are so much better. He is really keen to be seen.

CFN: Really enjoyed the 1:1 BBV sessions, has really helped my confidence in relation to understanding the BBV results.

BBV Nurse : It's really great engaging with patients that have been lost to follow up and supporting them through the care pathway.

BBV Nurse : I've really enjoyed building relationships with the Forensic nursing team. It gives us a great opportunity to engage with patients who don't access our service.

Case Studies:

Case Study 1:

Email referral from CFN (Clinical Forensic Nurse)- Patient believes he is Hepatitis C positive, partner Hepatitis C positive. Injecting drugs and at ongoing risk of exposure to other BBV's.

Outcome: Patient sent an appt to attend his chosen outreach clinic. Further investigation shows this patient has never previously been diagnosed with Hepatitis C although he believes he is positive. When patient attends clinic he will be offered repeat testing. We will also encourage him to discuss testing with his partner and invite her to clinic. Both patients will be offered Hepatitis B vaccination. If required we will deliver a package of harm reduction interventions including safer injecting advice, overdose risk, alcohol brief intervention, smoking cessation, safer sex, take home naloxone. The patient will be assessed for Hepatitis C treatment if his test results prove positive.

Case Study 2: Email referral from CFN (Clinical Forensic Nurse) - Patient known to be Hepatitis C positive, previously diagnosed in pregnancy but could not be treated at that time.

Outcome: This patient has been re referred back to a community outreach clinic and has started the assessment for Hepatitis C Treatment.

Case Study 3: Email referral from CFN (Clinical Forensic Nurse) - Patient is homeless. Drug and alcohol dependent. Does not know his HCV status but is most likely to be remanded in prison today.

Outcome: Patient has been seen by the BBV nurse in prison and will commence HCV treatment.

Case Study 4: Email referral from CFN (Clinical Forensic Nurse) - This patient is an IV Drug user. He is known to be Hepatitis C positive but got lost to follow up. He is keen to re engage with services.

Outcome: This patient was seen by the BBV nurses in HMP and has successfully been treated for his Hepatitis C. He is now negative.

Project Documentation:



NHS Lothian Custody suite BBV Consent

NAME:

DOB/CHI:

ADDRESS:

Name of Assessor:

Date of Assessment:

| |
|--|
| Identified risk _____ |
| Last at risk _____ Window period & Follow up _____ |
| Previous Test _____ Date _____ Result _____ |
| Harm reduction and Transmission Routes discussed <input type="checkbox"/> ABIs <input type="checkbox"/> THN <input type="checkbox"/> |

| |
|--|
| I consent for information about me to be shared between Health Care Professional Staff and relevant therapeutic agencies |
| Signed _____ Date _____ |

| |
|---|
| SAMPLES /Tests Obtained: HIV <input type="checkbox"/> Hepatitis C <input type="checkbox"/> Hepatitis B <input type="checkbox"/> |
| OraQuick Obtained Yes <input type="checkbox"/> NO <input type="checkbox"/> |
| Bloods / DBST Obtained (please circle) Yes <input type="checkbox"/> NO <input type="checkbox"/> |

| | |
|--|--|
| RESULTS | |
| OraQuick Result Reactive <input type="checkbox"/> | Non Reactive <input type="checkbox"/> |
| DBST / Blood Result received <input type="checkbox"/> | Patient Informed / Letter <input type="checkbox"/> |
| Referral to BBV Team required YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Referral completed by:- | |
| <u>Comments:</u> | |

Clinic Slots:



The Three Bridges Clinic Availability for BBV Follow Up Care: Signpost patient to preferred location and email the Three bridges account to confirm patient referral details and location.

ThreeBridgesProject@nhslothian.scot.nhs.uk

| Day | Location | Time | BBV Nurse |
|-----------|--------------------------------------|---------------------------------|---------------------------------------|
| Monday | RIDU WGH | 9-1pm | Sara Lamond |
| Monday | TPS 5 Links Place | 2-4pm alternate weeks | Fiona Rose |
| Tuesday | TPS 5 Links Place | 2-4pm | Mina O' Hara/Jacky Shaw |
| Tuesday | RIDU WGH | 9:30-4pm | Lindsay Chalmers Fiona Rose |
| Wednesday | Esk Centre Musselburgh | 10-2pm | Mark Quilietti-Bird/ Jacky Shaw |
| Wednesday | Westerhailes Health Living Centre | 10-4pm | Mina O' Hara Lindsay Chalmers |
| Wednesday | Howden Health Centre | 1:30-3:30pm alternate Wed | Jacky Shaw |
| Thurs | Spittal Street Centre | 1:30-4pm | Jacky Shaw |
| Thurs | Glenesk Substance Misuse Service | 10am – 12:30 alternate weeks | Mark Quilietti – Bird/Mina O' Hara |
| Thurs | RIDU WGH | 10-4pm | Sara Lamond/Fiona Rose |
| Friday | RIDU WGH | 10-12:00 | Lindsay Chalmers |

Please Note we have BBV Testing and Treatment clinics in both HMP Addiewell and HMP Edinburgh.

Edinburgh HMP : Jacky Shaw/ Fiona Rose

Addiewell HMP: Jacky Shaw / Sara Lamond

BBV Team 0131- 537 2856:

Sara Lamond

Fiona Rose

Lindsay Chalmers

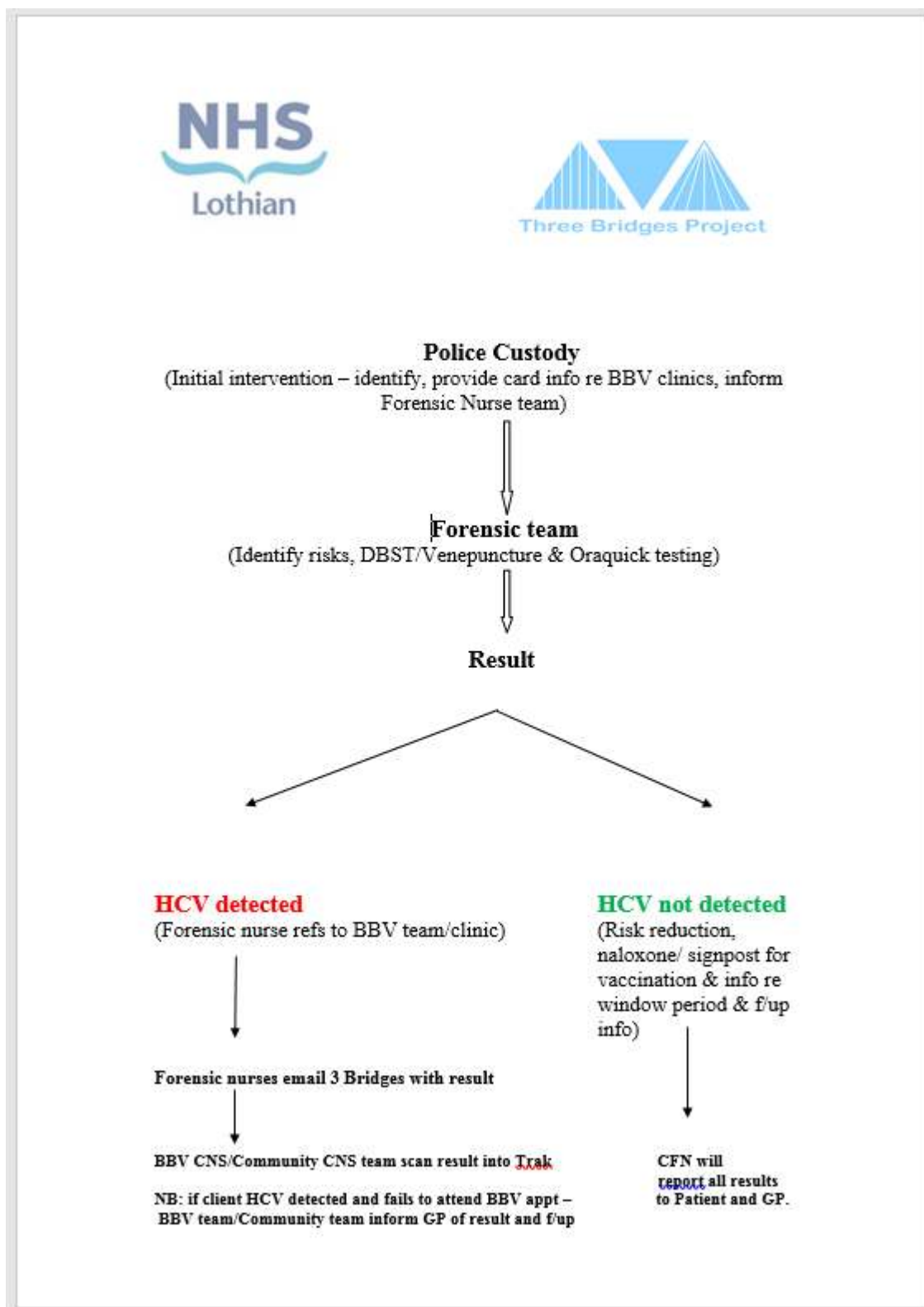
Community BBV Team 0131- 537 2843:

Mina O' Hara 07887 830 640

Jacky Shaw 078 9678 5799

Mark Quilietti-Bird

BBV Referral Pathway:



The Impact:

This is a very worthwhile project and ultimately will save patients lives. We know hepatitis C affects disproportionately the most deprived communities and the infection remains high amongst injecting drug users. This project gives nurses the opportunity to use their skills to identify those most at risk and deliver care at the point of contact.

Advances in Hepatitis C treatment has meant that it is safer, better tolerated and more effective than existing therapies. These new therapies simplify the treatment care pathway due to fewer monitoring requirements, shorter duration and increasing cure rates. We have an obligation to ensure those at risk of HCV are diagnosed and those who have been lost to follow up are aware of these new therapies so they can become virus free.

Although the project as seen small numbers so far the impact is significant in that those identified have engaged with Hepatitis C treatment services after many years of being disengaged. Had it not been for the Forensic Nursing Team these patients would most likely progress to chronic liver disease if left untreated.

The overall aim is to include BBV testing as part of a package of care and embed an opt-out testing model which will help to reduce some of the stigma and inequalities around Hepatitis C care and treatment.

Lessons Learned:

It is necessary to be flexible when working with three different nursing teams and to try to understand their challenges, what motivates them and how best to engage them.

It is helpful to understand different learning styles and adapt training to ensure staff can reach their full potential.

It is ok to experience resistance in the early days and to find ways to overcome it by working closely with early adopters.

It's important to support staff embrace change and accept that all feedback will not be positive especially in the early days.

Identify a Lead early on in the project, someone who shares the vision and is committed to making it happen.

Conclusion:

This has been a challenging piece of work for those involved in developing the necessary processes and pathways which essentially created the foundation for the service. It has been a slow process trying to navigate systems and test if they will work effectively for all three teams involved. It was frustrating at times trying to co-ordinate meetings, training events and finding the best way to share ideas. It was challenging moving the project forward as responses from staff were sometimes delayed which made it difficult to make decisions and ensure everyone was in agreement.

It was important to be aware of how other teams operate in terms of communication and especially challenging at times as staff were concerned how this new project was going to impact their role.

It has provided a new way of joint working which has benefitted both patients and staff. The nursing teams have really demonstrated a person centred approach to care by offering a package of interventions and ensuring patients can make fully informed choices. Ultimately this new service will lead to fewer missed opportunities.

Dissemination:

The plan is that once this service is fully embedded within the Forensic Nursing Suite in Edinburgh it will be rolled out to all Police Custody Suites across Scotland. Our work will be disseminated locally and nationally through our clinical networks, strategic meetings and professional nursing forums.

We plan to share our experience and feedback our work at conferences and present at QIT meeting.

We have already shared our newly developed pathways at a national meeting to improve opt out testing within prisons.

We will present a poster at one of the national public health /BBV conferences.

The Future...where to next:

The Nursing team lead by the BBV Champion will offer BBV testing as part of their standard of care to everyone referred to them in Police custody.

The BBV Champion will train a core group of staff to roll out the service.

The BBV Nursing Team will deliver some BBV Education to our Police colleagues.

We will evaluate and audit the service using the patient log data collated .

Financial Report:

| | Amount | Expenditure |
|---|--------|--|
| Instalment from QNIS | £2515 | £1600 for the Oraquick tests. We got a discounted price from the company providing the Oraquick tests from the original price quoted of (£2105). |
| | | £420 Laboratory fridge for storing samples. |
| | | £410 for HCV antigen testing |
| All staff who worked on this project did so as part of their contracted hours. From June 2018 the Forensic Clinical Nurse Manager allocated 24hrs nursing time monthly for a BBV champion to protect time to develop the service. | | £85 remaining in budget – this will be used towards developing some promotional materials for the service. |

Appendix:



Step-By-Step Instruction Guide
Refer to the Package Insert for complete instructions.

Before performing testing, all operators **MUST** read and become familiar with Universal Precautions for Prevention of Transmission of Human Immunodeficiency Virus, Hepatitis A Virus, Hepatitis B Virus, Hepatitis C Virus, and other Bloodborne Pathogens in Health-Care Settings.

Handle specimens and materials contacting specimens as if capable of transmitting infectious agents. Dispose of all test specimens and materials used in the test procedure in a biohazard waste container. Oral fluid is not considered potentially infectious unless it contains blood.

Warnings, Restrictions, Precautions and Limitations of the Test are not included in this abbreviated Step-By-Step Instruction Guide.

Intended Use

The OraQuick® HCV Rapid Antibody Test is a single-use, qualitative immunoassay to detect antibodies to the Hepatitis C Virus (HCV) in oral fluid, fingerstick and venous whole blood, serum and plasma specimens. The OraQuick® HCV Test may be used to provide presumptive evidence of HCV infection in individuals with signs and symptoms of Hepatitis and in individuals at risk for Hepatitis C infection.

WARNING: Not intended for use in screening blood, plasma, or tissue donors.

STORAGE INSTRUCTIONS:

- Store unused OraQuick® HCV Tests unopened at 2°-30°C.
- Do not open the pouch until you are ready to perform a test.
- Bring all components to operating temperature (15°-37°C) before opening.

Materials Provided in the Kit:

- Package Insert (full instructions for use)
- Reusable Test Stand
- Specimen Collection Loops

The divided pouch contains:

- OraQuick® HCV Test: Single-use test device with built-in sample collection pad (Flat Pad)
- OraQuick® HCV Developer Solution Vial

Materials Needed but Not Provided:

- Timer or watch capable of timing 20 to 40 minutes
- Biohazard waste container

Additional Items required for fingerstick and venipuncture whole blood collection, serum and plasma specimens:

- Antiseptic wipe
- Sterile gauze pads
- Latex, vinyl or nitrile disposable gloves (optional for oral fluid testing)
- Sterile lancet for fingerstick or venipuncture supplies to collect whole blood, plasma or serum
- Centrifuge to process a serum or plasma specimen



General Test Preparation

1. Allow all components to come to operating temperature (15°-37°C).
2. Place the reusable Test Stand on your work space. Use only the Stand provided with the OraQuick® HCV Kit. Set up your timer for 20 to 40 minutes but **DO NOT** start.
3. Do not open the pouch until you are ready to perform a test. Check the pouch for damage or holes. Discard the pouch if it is damaged.
4. After opening the pouch, check for an absorbent packet. If it is not present or appears damaged, discard the pouch and open a new one.
5. Hold the Vial firmly in your hand. Remove the cap by rocking it back and forth while pulling it off. Set the cap aside. Slide the Vial into the top of one of the slots in the Stand.
6. **DO NOT** cover the 2 holes on the back of the test with labels or other materials. Blocking the holes may cause an invalid result.



OraQuick[®] Rapid Antibody Test HCV

The OraQuick[®] HCV Test is approved for use with multiple specimens. The procedure for using oral fluid is illustrated below. The procedures for fingerstick whole blood, venous whole blood, plasma or serum are presented on the next page. Instructions for reading results are on the back page of this brochure.

Step 1. Collect Oral Fluid

Swab completely around the lower and upper gum **ONE TIME**.
DO NOT swab the roof of the mouth, cheeks or tongue.



Collection Tips

- Do not eat, drink or chew gum for at least 15 minutes prior to testing.
- Wait at least 30 minutes prior to testing after use of oral care products.
- Remove the OraQuick[®] HCV Test from the pouch. **DO NOT** touch the Flat Pad.

Step 2. Perform the Test

Insert Device into buffer.



Start the timer.



Pink fluid travels through the Result Window.



- **DO NOT** move while test is running.
- **DO NOT** remove the device from the Developer Solution while the test is running.

Step 1a. Options for Blood Collection

A. Fingertick Whole Blood



Collection Tips

- Hold the finger downward and apply gentle pressure beside the point of puncture. Avoid squeezing the finger to make it bleed.
- If the Loop is dropped or contacts any other surface, discard it. Use a new Loop to collect the blood.

B. Venous Whole Blood



For use with EDTA, sodium/lithium heparin and sodium citrate.

- Whole blood may be stored at 15°-30°C or up to 3 days or at 2°-8°C for up to 7 days.
- Invert the tube several times to mix.

C. Plasma or Serum



For use with EDTA, sodium/lithium heparin and sodium citrate or serum (SST).

- Specimens stored frozen at -20°C may have up to 3 freeze-thaw cycles.
- Serum/plasma may be stored at 15°-30°C for up to 3 days or at 2°-8°C for up to 7 days.
- Centrifuge at 1000-1300 x g for approximately 5 minutes.

Step 1b. Mix

- Immediately insert the Loop into the Developer Solution. Mix with Loop. Discard the used Loop in a biohazard waste container.



Step 2. Perform the Test

| Insert Device into buffer. | Start the timer. | Pink fluid travels through the Result Window. |
|---|------------------|---|
| | | |
| <ul style="list-style-type: none"> • DO NOT move while test is running. • DO NOT remove the device from the Developer Solution while the test is running. | | |

Step 3. Read Results Between 20 and 40 Minutes

Non-Reactive: Line in C Zone Only

| Line in C Zone No HCV antibodies detected. | Interpretation of Results. |
|---|--|
|  | <ul style="list-style-type: none"> A non-reactive test means that HCV antibodies were NOT detected in the sample. The patient is presumed not to be infected with HCV. |

Reactive: Lines in C and T Zones

| Examples of positive results. Lines in C Zone in each test. | | | Interpretation of Results. |
|---|---|---|---|
| Line in T Zone | Line in T Zone | Faint Line in T Zone | |
|  |  |  | <ul style="list-style-type: none"> A reactive test means that HCV antibodies were detected in the sample. The patient is presumed to be infected with HCV. Follow appropriate guidelines for supplemental testing. |

Invalid: No Lines in C Zone or Partially Developed Lines

The result cannot be interpreted. Repeat the test with a new Device and new Specimen.

| No Line in C Zone | Red background obscures results | Partial Line on one side of C or T Zones | Interpretation of Results. |
|---|---|---|--|
|  |  |  | <ul style="list-style-type: none"> An invalid test means that there was a problem with the test or sample. The result cannot be interpreted. |

General Test Clean-Up

- Dispose of the used test materials in a biohazard waste container.
- When using gloves, change your gloves between each test to prevent contamination. Throw the used gloves in a biohazard waste container.
- Use a freshly prepared 10% solution of bleach to clean-up any spills.

| Order Information | Description |
|-------------------|------------------|
| | Box of 25 tests |
| | Box of 100 tests |
| | Controls |



OraSure Technologies
 220 East First Street
 Bethlehem, PA 18015 USA
phone: 1-610-882-1820
web: www.OraSure.com
 Made in the USA

Please refer to the Package Insert for complete information and instructions on the proper use of the OraQuick® HCV Rapid Antibody Test.
 ©2009, 2010 OraSure Technologies, Inc. U.S. Patent #7,192,255, #7,541,194 and various international and U.S. patents pending. OraQuick® is a registered trademark of OraSure Technologies, Inc.
 Item# OQ H3-2001-2285 Rev. 03/10



EE REP

Qarad b.v.b.a.
 Voimolenheide 13
 B-2400 Mol
 Belgium

References:

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^{iv} Taylor A, Munro A, Allen et al. Hepatitis C Prevalence and Incidence among Scottish Prisoners and Staff Views of its Management, 2012. University of the West of Scotland, University of Bristol, NHS Health Scotland.

^v World Health Organisation (WHO) 2015 Dr. Gottfried. There's a reason viral hepatitis has been dubbed the "silent killer". WHO Media Centre . Accessed <http://www.who.int/mediacentre/commentaries/viral-hepatitis/en/> accessed 20th August 2018.

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^{vii} National Institute for Health and Clinical Excellence (NICE). Hepatitis B and C: Ways to promote and offer testing to people at increased risk of infection 2012.