

Blood Borne Virus (BBV) Testing in Prisons: Best Practice toolkit for reception-based pathways

Kate Dorrington RN Ba (hons) MSc Psych
Principal Medical Scientist, Medical Affairs,
Gilead Sciences UK & Ireland

Dorrington K¹ , Alexander H², Catt J³ , Mohammed Z⁵ , Cox S⁴, Jones A¹ Milner A¹.
¹Gilead Sciences Ltd, London, UK. ²Practice Plus Group, Reading, UK. ³Kings College
NHS Trust, London. ⁴The Hepatitis C Trust, London, UK. ⁵Imperial College Healthcare
NHS Trust, London.

Acknowledging Community

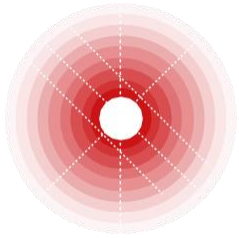
I want to begin by acknowledging and thanking our partners in creating this piece of work

- Practice Plus Group
- Hepatitis C Trust
- Dr Zameer Mohammed (Imperial Health Care NHS Trust)
- Ms Janet Catt (Kings College NHS Trust, London)

Most importantly the biggest thank you goes to the residents within the prisons who have made our work possible

Disclaimer

- The regional blood-borne virus (BBV) nurse team within PPG and National Prison Partnership HITT Manager within the Hepatitis C Trust are fully funded by Gilead.
- Gilead plays an active role in the design and execution of the activities that form this Prison HCV Elimination Program.
- Selection of DAA treatment regimen was determined by the treating clinician following the national rate card and with patient input; Gilead staff have no influence over regimen selection
- The presenter is employed by Gilead Sciences Ltd



Background

- Historic national English national elimination initiative program created in 2019 with the aim to reach elimination by 2025
- Practice Plus Group (PPG) is the provider of healthcare to 47 English prisons with approximately 30,000 residents
- PPG partnered with the Hepatitis C Trust (HCT) a patient organisation, and Gilead Sciences with the aim of increasing HCV screening and linkage to care across their 47 sites

Poster # 2095 Is Elimination of Hepatitis C Across an Antire Prison Network Possible? A Nurse-Led Test and Treat Model in 47 English Prisons

Hannah Alexander UK¹; Andy Jones UK²; Phil Troke UK³; Kate Dorrington UK⁴; Andrew Milner UK⁵; Sean Cox UK⁶; Iain Brew UK⁷

¹Health in Justice, Practice Plus Group, Reading, UK; ²Medical Affairs, Gilead Sciences Ltd, London, UK; ³The Hepatitis C Trust, London, UK;

Background

- National Health Service England (NHSE) plans to eliminate Hepatitis C in England before 2030.
- Hepatitis C is common in prison, with previous estimates suggesting ~7% of the UK prison population have been exposed to the virus.
- Prison-based (or in-prison) HCV testing was introduced by Public Health England and NHS England in 2013 and fully implemented by 2018. Despite this only 16.4% of new receptions were tested for HCV in English prisons for the year 2017/18.

Aim

- Assess the impact of a nurse-led HCV test and treat model across a network of 47 English prisons.

Method

- Practice Plus Group (PPG) is the provider of healthcare to 47 English prisons with approximately 30,000 residents. In 2019, PPG partnered with the Hepatitis C Trust (HCT) and Gilead Sciences with the aim of increasing HCV screening and linkage to care.
- Individual prisons face different challenges in delivering HCV care and therefore each needs a pathway optimised to their specific environment. To achieve this, PPG Regional BBV Lead Nurses and Gilead Medical Scientists set multi-stakeholder pathway groups to create individualised care pathways, with regular subsequent review to adapt to changing circumstances, including COVID-19.
- HCV screening was transitioned to point of care (POC) tests.
- Accelerated BBV training of prison healthcare staff was delivered by Gilead Medical Scientists whilst HCT Peers with a personal experience of HCV engaged residents and prison officers.

Results

- Data was extracted from the electronic patient record tool SystemOne to measure National, Regional and individual prison performance.
- Improved individualised screening pathways, staff and resident engagement and the use of POC testing resulted in a near ten-fold increase in HCV screening on entry to prison from 22.9% at the start of the partnership in January 2019 to 81.4% in April 2021.
- In the 2 years since the partnership was formalised in May 2019, over 45 thousand new admissions were tested within 7 days of arrival and 1,522 patients have been initiated on DAA treatment.
- A UK national lockdown due to COVID-19 in March 2020 significantly impacted HCV test offer and uptake rates but modifications to the pathways allowed increases to be maintained through a second national lockdown (Figure 1).
- High levels of DAA treatment initiation were maintained throughout the first 2 years of this project despite challenges due to the COVID-19 pandemic.

Conclusions

- BBV care pathways individualised for each prison, in combination with education and the use of Peers, has proven to be successful in doubling the testing of new receptions for HCV. The key to success has been the role of the Regional BBV Lead Nurses in driving the improvements through the on-site prison healthcare staff.
- If testing rates continue to rise and treatment is maintained then it is entirely possible for the prison network to achieve the NHSE HCV micro-elimination target of 95% testing and 90% of diagnosed patients commenced on treatment.

Figure 1. Pathway development

Number of prison healthcare staff groups in each prison
Number of HCV test kits per site per month
Number of HCV test kits per site per month

Category	Test 1	Test 2	Overall
New entries without BBV test reported within 7 days	45,000	47,700	46,350
Number of new admissions with HCV test reported within 7 days	4,170	38,970	35,740
Percentage of new admissions with HCV test reported within 7 days	9.3%	81.7%	77.1%
Number of new admissions with HCV test reported within 7 days	22,410	23,400	22,905
Percentage of new admissions with HCV test reported within 7 days	49.8%	49.3%	49.6%
Number of new admissions with HCV test reported within 7 days	1,025	1,320	1,173
Percentage of new admissions with HCV test reported within 7 days	2.3%	2.8%	2.5%

Table 1. Overview of HCV testing

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World Hepatitis Day marked by prison micro-elimination success

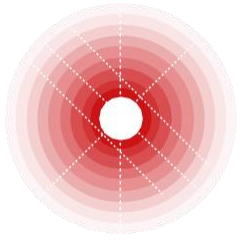
27 July 2021

A project to eliminate the virus hepatitis C (HCV) from prisons in England took a step closer to success on World Hepatitis Day as 15 sites were announced as reaching the micro-elimination criteria.



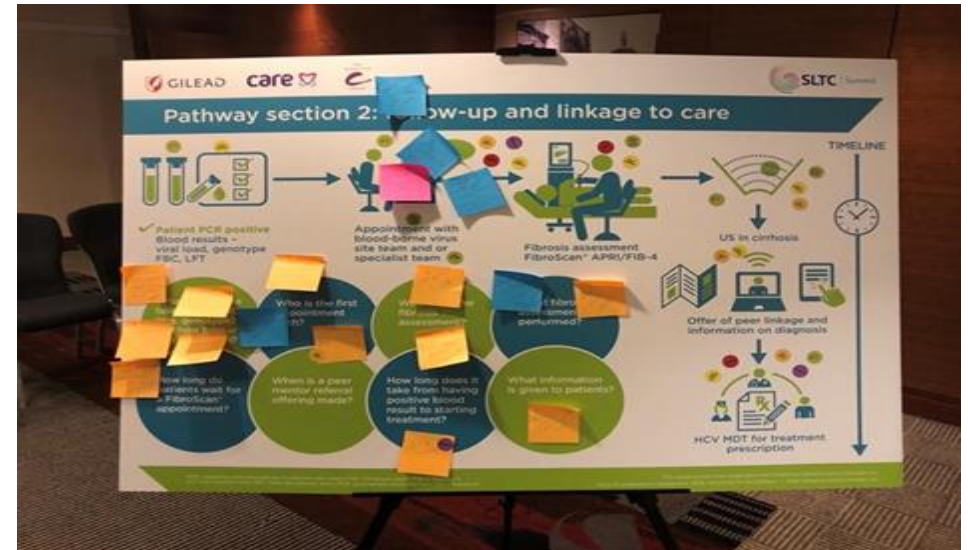
The Hepatitis C Trust and Gilead Sciences – aims to eliminate the virus by 2025 from the 47 prisons where

PPG = Practice Plus Group
HCT = Hepatitis C Trust
BBV = Blood Borne Virus

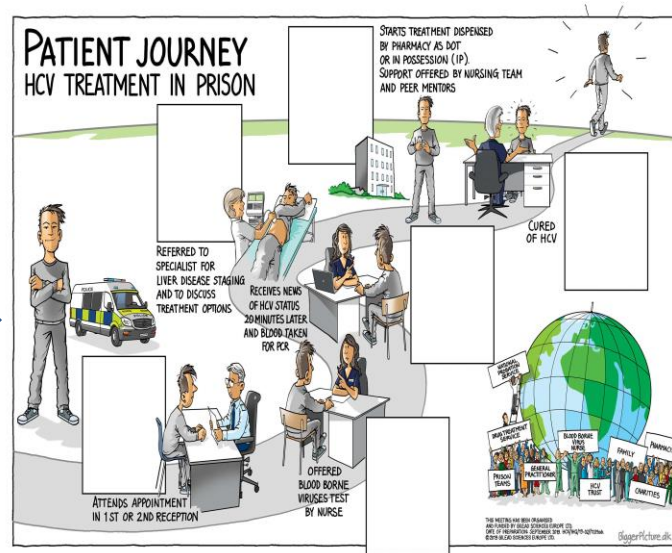


Toolkit Concept

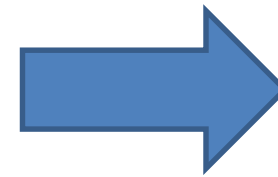
- Education is key to pathway construction and ongoing development
- Identified need to provide a resource to support cross functional stakeholders involved in BBV pathways from an operational perspective
- The key aim was to offer a practical resource to empower teams to grow expertise in how to independently assess, manage and evaluate their own bespoke pathways
- The BBV Reception based pathway toolkit was the first of 3 toolkits produced to share best practice



Key Fundamentals



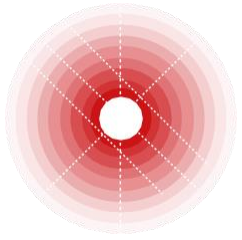
Collaborative cross functional teams



Building strong robust patient centric care pathways together

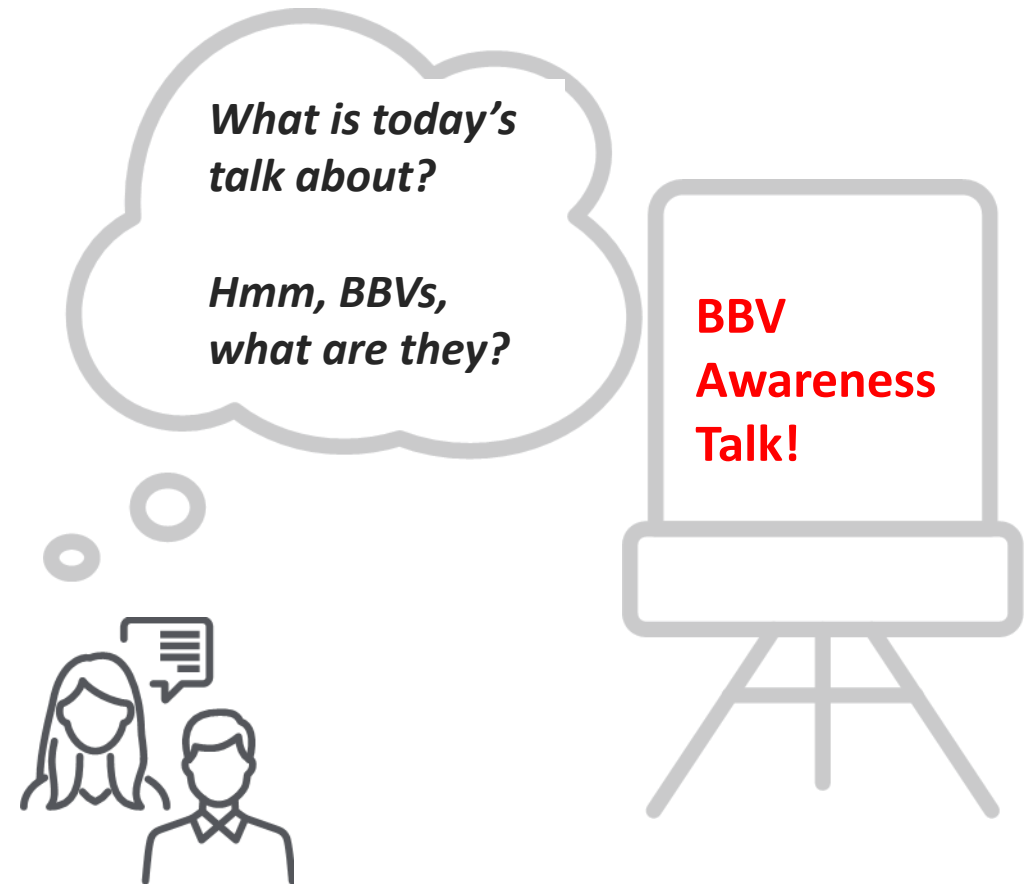


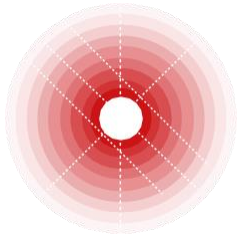
Ensuring that every resident has prompt access to the best quality care



BBV Reception Pathway Toolkit

- Education and training of staff and residents have been key to the project since its commencement
- Pathway Workshops, accredited BBV awareness training and peer led education with residents and prison service staff have been employed
- The concept of the toolkit format was to provide best practice as a structured adaptable interactive guidance
- The toolkit was created with experienced partners who are recognized as clinical experts in the field.
- A key aim of the toolkit is to support teams to operationalize and manage effectively their BBV pathways





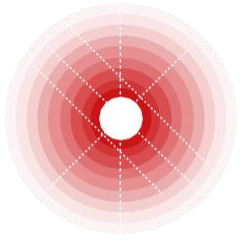
BBV Reception Pathway Toolkit – Contents

- The toolkit runs in a sequential flow of ‘how to’ to set up, manage and evaluate BBV testing pathways
- There are ‘consideration’ points to threaded throughout
- Each part of the toolkit has embedded links so the user can enter at any chosen point and move around or choose to follow the flow



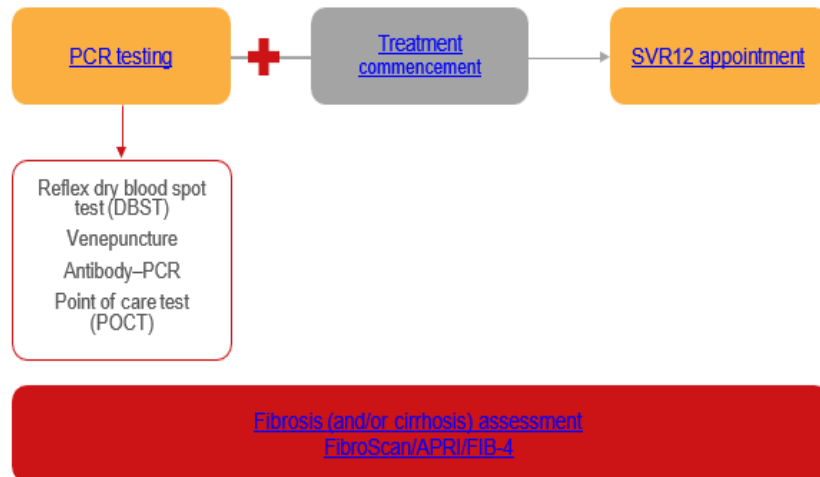
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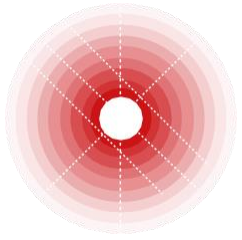


BBV Reception Pathway Toolkit – Care Pathway

Best Practice HCV Patient Care Pathway



- A key aim of the toolkit is to encourage simplified pathways of care that enable residents to get tested, treated and cured
- Testing and subsequent treatment initiation for PCR positive patients should be rapid and within an agreed local timeframe

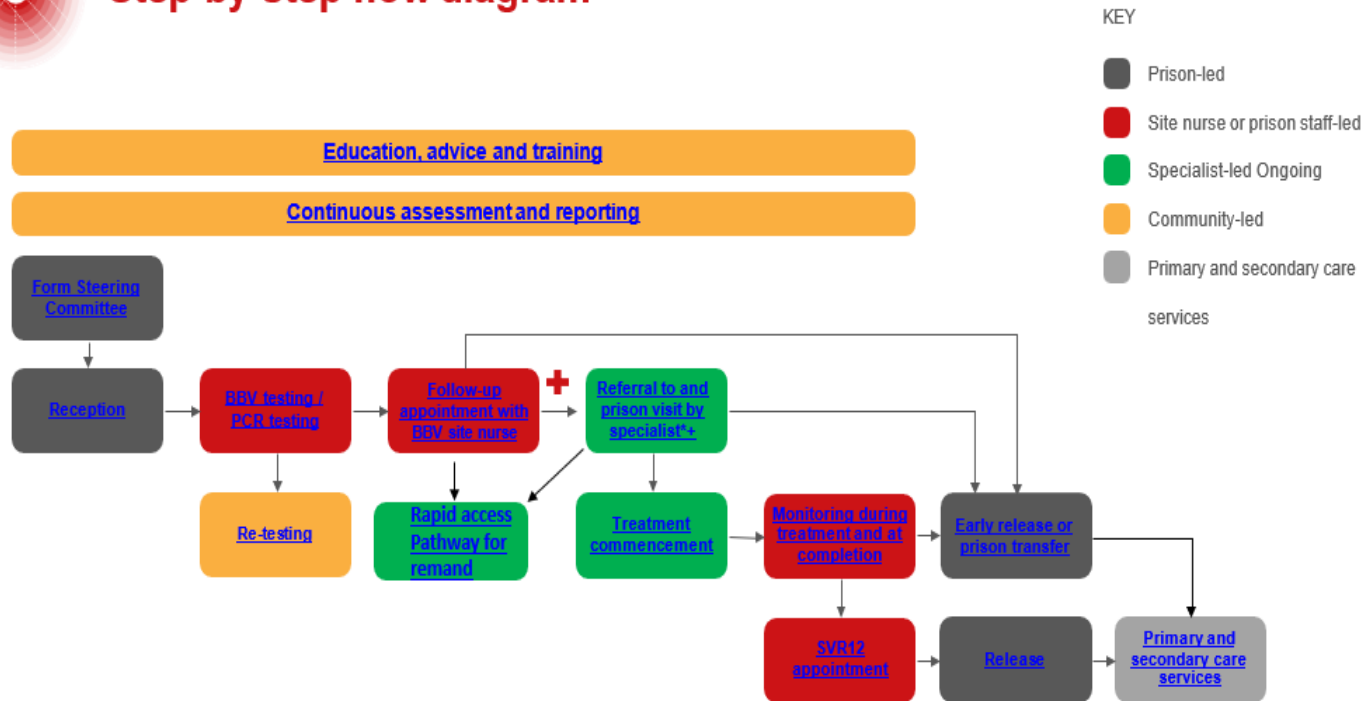


BBV Reception Pathway Toolkit

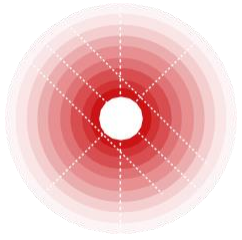
– Care Pathway



Step-by-step flow diagram



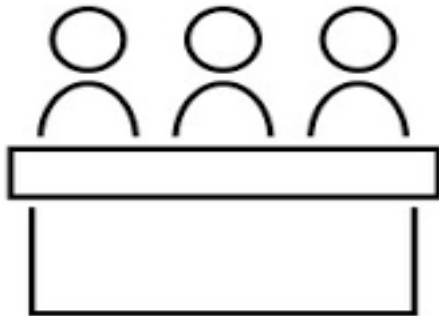
- Diagram formulates the complete flow from setting up a pathway management team through to community release
- Education, advice and training plus continuous assessment of the pathway are long term requirements and continue throughout
- Multi stakeholder collaboration underpins the pathway
- Recommendation for consideration of a rapid access or fastrack pathway for treatment for those who are on remand or likely to leave the prison quickly (short sentence etc)



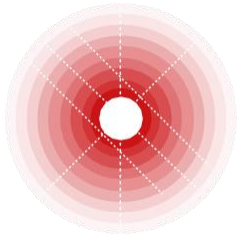
Steering Committee

Forming a cross party steering committee accountable for pathway construction, management and review has been a key element of best practice

Benefits



- Enables bespoke assessment of need
- Role Clarity
- Enables setting, implementation and tracking of key performance metrics
- Enables effective goal setting
- Enables successful troubleshooting or solutions when needed
- Build in patient narrative to the pathway
- Builds and embeds team working and communication across organisations



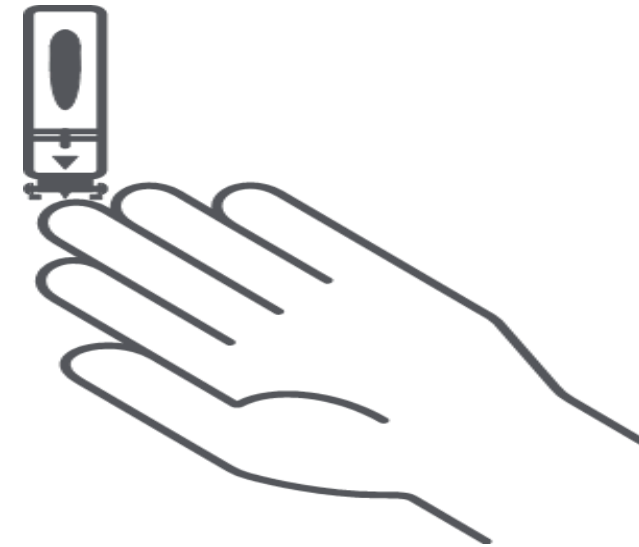
The Testing Journey

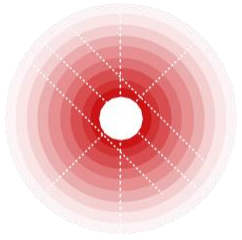
Key Questions

Understanding your current pathway is important
Does everyone understand the pathway and their role
What do you want to achieve, how and by when

Testing Considerations

- Where do patients enter the prison (reception?)
- How many enter per week/month
- Where is the test offered
- Where is the second offered if first offer declined
- What test is offered and by whom
- When, where and by whom are results given
- How long before PCR results return and results given to patient
- Test to treatment journey time





Diagnosis and Results Giving – putting patients first

Clinical

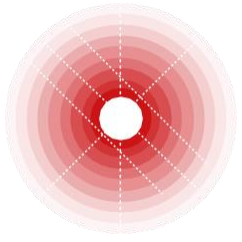
- Harm reduction and repeat screening process
- Managing confidentiality
- Keeping the patient involved in their care
- Data capture system
- Process for treatment referral and turnaround times
- Community referral process for on release



Patient

- Peer support and general support
- Resources
- Concerns and worries e.g., confidentiality, stigma, myths, needle phobia
- Language/ cultural
- Coming to terms with diagnosis
- Taking treatment – patient choice, support needed to take full course
- Telling family and loved ones
- Support if being released





Diagnosis - Non Invasive Tests

- Fibroscan (portable transient elastography)
- Fibrosis - 4 (FIB 4)
- APRI (AST to platelet ratio)

Considerations

- Access to Fibroscan, APRI, Fib-4
- Getting equipment into a prison (security)
- Training and education
- Needle phobic patients
- What education do patients get

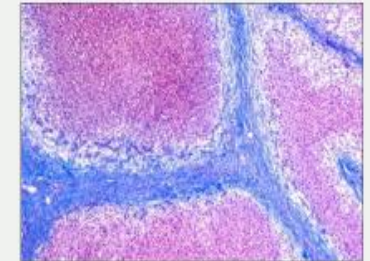
Methods of assessing liver fibrosis



Serum markers
(e.g. FibroTest, APRI, FIB-4, ELF)¹



Hepatic elastography
(e.g. FibroScan)

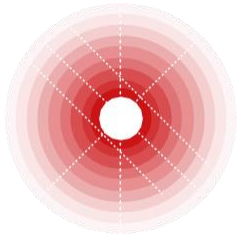


Liver biopsy
Not routinely used

¹FibroTest - biomarker test that uses the results of six blood serum tests to generate a score that is correlated with the degree of liver damage in people with a variety of liver diseases
APRI, AST to Platelet Ratio Index (APRI) - predicts fibrosis and cirrhosis in patients with hepatitis C. Available at: <https://www.hepatitic.us.edu/page/clinical-calculators/apri>. Accessed March 2021
FIB-4, Fibrosis-4 - A simple, online calculation that uses biomarkers obtained through blood samples to help estimate the amount of scarring in the liver. Available at: <https://www.hepatitic.us.edu/page/clinical-calculators/fib-4>. Accessed March 2021
ELF, Enhanced Liver Function™ - a routine blood test that provides an ELF score that delivers information on liver fibrosis severity

1. Joseph J. Clin Biochem Rev 2020;41(2):67-72.





Treatment – Adjuvant Pathways

- Medicine supplies chain in prison – can the Pharmacist develop localised pathway with Steering committee that works with treatment prescriber
- Pathway in place for residents being discharged to court or prison transfer to be transferred with medication (in and out of office hours)
- Pathway in place for residents bringing BBV medication into prison to continue their treatment

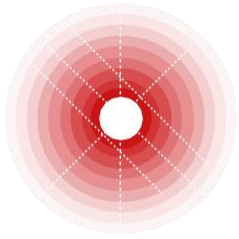


Considerations

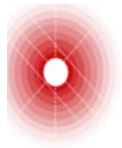
- How much time does it take for a prescription to reach the prison and then patient?
- How many steps in that pathway?

Think Patient - support, adherence and monitoring

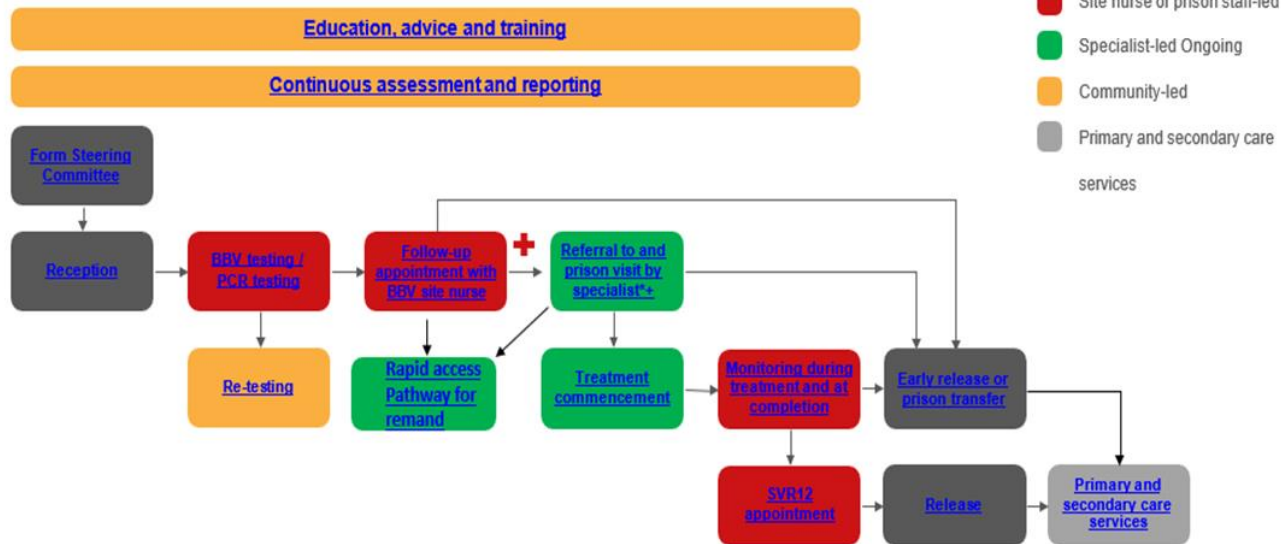
- Can the patient be in possession (IP) of the treatment?
- What support from staff and or peers are needed?
- What resources are there?
- Are there resources for those who can not or have difficulty reading or speak/ read another language?
- Is medicine dispensed discreetly?
- Would directly observed therapy help or combined with opiate substitution therapy if appropriate? (DOT)
- Adherence diary log?
- Think ahead for discharge plan support (DOT etc)



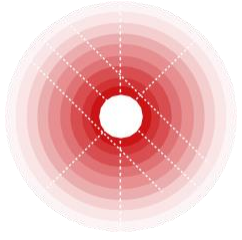
Release



Step-by-step flow diagram

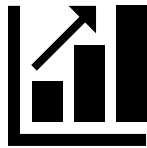


- Pathway should ideally not stop when treatment ends
- Preparation for release with continuity of care
- Focus on holistic pathways to help prevent reinfection and harm reduction
- Capturing SVR12
- Building partnerships with community providers and peer partnerships



Managing and Improving Pathways

Why performance manage?

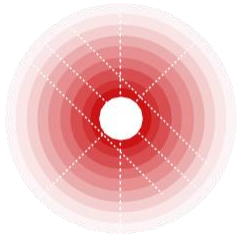


- Key to improving and tracking successes
- Enable detailed analysis of pathway
- Small changes can make big differences
- Allow for evidence-based decision making

How to do it



- Recording of data
- Setting key performance metrics
- Regular reviews
- Benchmarking and tracking performance
- Analysing each step of the pathway

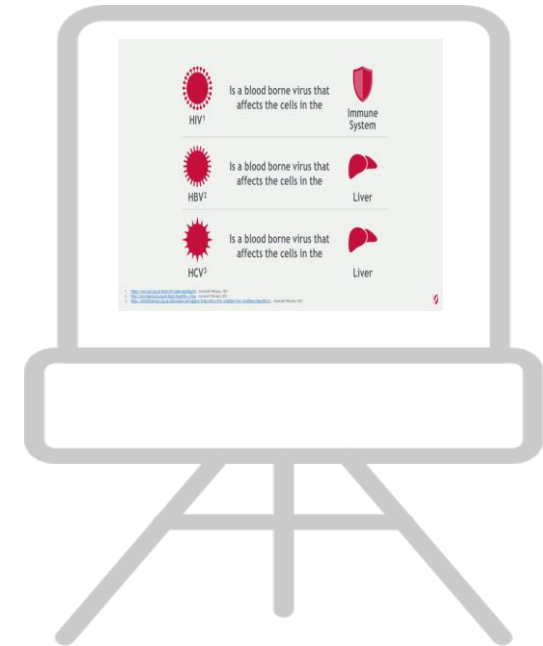


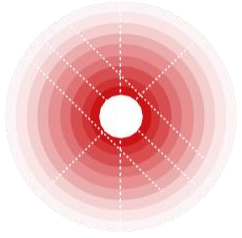
Education and Training

Education and awareness – ongoing and reciprocal

- Residents
- Peers
- Prison Officers
- Health care teams
- Non health care staff
- Prison leadership
- Hospital teams

You do not need to be an expert!

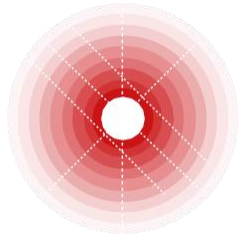




Final 5 - Key points

- **Build a working cross functional team** – forge partnerships and collaborations to create holistic well rounded care pathways
- **Set clear goals and clear roles** - know what you want to achieve as a team and set clear actions
- **Track your progress** – you can only know your successful if you monitor your metrics
- **Think patient** – keep them involved at every step!
- **Never be afraid to ask for help** – no one person can be an expert in everything.





Thank you