

# EVALUATING THE POPULATION IMPACT OF HEPATITIS C DIRECT ACTING ANTIVIRAL TREATMENT AS PREVENTION FOR PEOPLE WHO INJECT DRUGS (EPITOPE) - A NATURAL EXPERIMENT

Hickman M, Dillon J, Elliott L, De Angelis D, Vickerman P, Foster G, Donnan PT, Eriksen A, Flowers P, Goldberg D, Hollingworth W, Ijaz S, Liddell D, Mandal S, Martin NK, Beer L, Drysdale K, Fraser H, Glass R, Graham L, Gunson R, Harris H, Harris M, Harris R, Heinsbroek E, Hope V, Horwood J, Inglis S K, Innes H, Lane A, Meadows, J, Thorne, B, McAuley A, Metcalfe C, Migchelsen S, Murray, A, Myring G, Palmateer N, Presanis A, Radley A, Ramsay M, Samartsidis P, Simmons R, Sinka K, Vojt, G, Ward Z, Whiteley D, Yeung, A, Hutchinson S

### **EPIToPe Overview**

The primary aim of EPIToPe is to generate UK empirical evidence on the effectiveness of HCV 'Treatment as Prevention' in people who Inject drugs (PWID).

Theoretical mathematical modelling evidence suggests HCV treatment scale-up can prevent transmission and substantially reduce HCV prevalence and incidence among PWID.

In Tayside we have demonstrated successful scale-up of DAAs among PWID with testing and treatment in multiple community settings and observed substantial reduction in chronic HCV in the population.

A qualitative study interviewed service users and providers to identify facilitators and barriers to scaling-up HCV testing and treatment for PWID, resulting in a set of recommendations.

Available at: https://www.gcu.ac.uk/\_\_data/assets/pdf\_file/0019/38350/ epitope\_manual\_recommedations\_final\_version\_sep2021.pdf

We are finalising a model for our WS5 evaluation of HCV TasP, with the effect of intervention (DAAs) being the difference between:

come that we would observe if there were no scale-up from 2015. We can also use this to estimate the probability that specific "elimination" targets have been met .

Hickman M, et al. BMJ Open 2019. PMID: **31551376** PMCID: <u>PMC6773339</u> DOI: <u>10.1136/bmjopen-2019-029538</u>

EPIToPe Programme (Evaluating the Population Impact of Hepatitis C Direct Acting Antivral Treatment as Prevention for People Who Inject Drugs) WS1: Demonstration study of rapid large scale HCV WS3: Qualitative study of the barriers and DAA therapy to PWID in Tayside (intervention site) facilitators to scaling up HCV DAA therapy to PWID WS1 recruits ■ What are the system-, provider- and patient-level patients for WS3 Can rapid large-scale HCV DAA therapy be delivered to barriers and facilitators to scaling up HCV DAA therapy to PWID in the community? Are cure (SVR) rates comparable to other real-world ■ What are the collateral effects of HCV DAA therapy on examples? health risk behaviours of PWID, their engagement with What is the rate of HCV re-infection following services and perceptions of 'recovery'? treatment and cure? WS3 generates logic model and manual on WS1 provides a template for scaling up how best to scale-up therapy in WS5 therapy in WS5 WS1 provides WS5: Evaluation of HCV Treatment as Prevention in data for impact England and economic nodelling in WS4 Can we conduct a large-scale evaluation to provide definitive evidence for patients, clinicians and policy makers? WS4 provides model estimates WS2 provides outcome data and methods for design of for evaluation in WS5 evaluation in WS5 WS4: Modelling the intervention effect and cost-WS2: Enhancing Public Health Surveillance to effectiveness of scaling up HCV DAA therapy to monitor HCV, behaviours and service utilisation WS2 provides among PWID in the intervention and control sites data for impact and economic across the UK What is the effect of the intervention (in WS1) on modelling in WS4 observed outcome with DAAs scale-up and counterfactual: the outchronic HCV prevalence among PWID? ■ What are the trends in chronic HCV prevalence & What is the contribution of HCV treatment and other incidence among PWID in intervention and control sites primary prevention interventions to the intervention pre and post the demonstration study (in WS1)?



## EPIToPe at INHSU 2022: where to find out more

Prevention using real-world data?

■ What is the cost-effectiveness of HCV Treatment as



Real-world examples of success in achieving HCV elimination among people who inject drugs: Scotland

John Dillon, University of Dundee, UK

Thursday 20th October Loch Lomond Auditorium: Session K 09:20am

## PRESENTATION:

effect?

# **Evaluating the impact of direct-acting**

anti-viral therapy on Hepatitis C Viraemia among people who inject drugs

> Pantelis Samartsidis, University of Cambridge, UK Thursday 20th October Room Dochart: Session O

> > 14:00pm

PRESENTATION:

**Changing Trends in Hepatitis C Reinfection** Rates Following the Scale-up of Direct-**Acting Antivirals Among People Who Inject Drugs in Scotland** 

Norah Palmateer, Glasgow Caledonian University, UK

Thursday 20th October Room Dochart: Session O 14:15pm

## PRESENTATION:

Can we develop methods to estimate the number of

Can we determine if DAA therapy leads to improved

health risk behaviours and uptake of drug services?

PWID and chronic HCV PWID ?

Changes in self-reported quality of life associated with successful DAA hepatitis C treatment in people who use drugs

Scott McDonald, Glasgow Caledonian University, UK Thursday 20th October Loch Lomond Auditorium: Session K 10.15am



## **WORKSTREAM 3 POSTERS**

- 1. Patient reported outcomes of recovery and quality of life post hepatitis C treatment.
- 2. Integrating hepatitis C testing and treatment into multiple community healthcare settings for those who inject drugs: Facilitators and Barriers.
- 3. Integrating hepatitis C testing and treatment into community healthcare settings for those who inject drugs: Formulating Recommendations



## **WORKSHOP:**

Peer research in Hepatitis C Treatment for **Those Who Inject Drugs** 

> Lawrie Elliot and Gabriele Vojt Glasgow Caledonian University, UK

> > Thursday 20 October 2022

11:15am – 12:15pm

Scottish Event Campus

For further information on any of the work **EPIToPe** is conducting, please contact:

EPIToPe | Bristol Medical School: Population Health Sciences | University of Bristol

Email: Beth.Thorne@bristol.ac.uk



## **POSTER PRESENTATIONS:**

Higher incidence of HCV re-infection among treatment experienced people who inject drugs in Tayside, Scotland.

Christopher Byrne, University of Dundee, UK Poster Tour 01: Wednesday 19th October 15.55pm

Overlapping adverse health outcomes among people who inject drugs in England, Wales and Northern Ireland, 2019-2020

Claire Edmundson, UK Health Security Agency, UK Poster Tour 04 Friday 21st October 11.15am

This study is funded by the National Institute for Health Research (NIHR) Programme (Grant Reference Number RP-PG-0616-20008). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.





















FUNDED BY