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

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Introduction:
We aim to generate empirical evidence on the effectiveness of HCV "Treatment as Prevention" (TasP) in people who inject drugs (PWID) and give an overview of the EPIToPe programme.

Methods and Analysis
We have established a mixed method natural experiment with Tayside, Scotland, as a single intervention site where HCV care pathways have been rapidly scaled-up (drug treatment clinics, needle & syringe programmes, pharmacies, and prison). Since 2017, more than 570 PWID have been treated in Tayside – which we hypothesised would reduce chronic HCV prevalence and transmission by >60%.
A nested qualitative study with patients and service providers identified barriers and facilitators to implementing TasP and generated a manual for delivering TasP. Peer and researcher-led interviews, with 40 PWID assessed whether successful treatment alters perspectives on and engagement with opioid drug treatment and recovery – and also raised questions over how to support peer-led researchers.
Chronic HCV prevalence in PWID measured using information from the Needle Exchange Surveillance Initiative (NESI) survey in Tayside fell from ~30% to 10% - but also fell in other sites in Scotland and in England. This meant we had to move away from adapting synthetic control methods to other statistical methods to estimate the intervention effect – and test the probability that

intervention scale-up intensity is associated with reductions in chronic HCV and that WHO elimination targets are met.
We are adapting a dynamic HCV transmission model to evaluate the cost-effectiveness of the HCV TasP intervention and estimate contribution of HCV treatment and other interventions to reductions in HCV transmission.
We are creating a "virtual cohort" of PWID in Scotland linking administrative databases on HCV treatment, Opioid Drug Treatment, and Mortality that will test whether DAA treatment improves drug treatment outcomes for comparison with qualitative accounts; and update estimates of the size of the PWID population.

Disclosure of Interest Statement:
MH in the last five years has received unrestricted honoraria for presenting at meetings from Abbvie, Gilead, MSD. SH has received honoraria from Gilead, unrelated to submitted work. NM has received unrestricted research grants and honoraria from Gilead and Merck. PV has received unrestricted honoraria for presenting at meetings from Abbvie and Gilead. PTD has received unrestricted grants from Shire pharmaceuticals, Novo Nordisk and Gilead and is a member of the Scottish Medicines Consortium. HF has received an honorarium from MSD. AR has received unrestricted honoraria and grants from Gilead Inc, AbbVie, grants from Roche and grants from Bristol Myers Squibb. KD has worked as a sub-investigator on clinical trials sponsored by Gilead and AbbVie. JFD has received unrestricted honoraria and grants from Gilead, BMS, MSD and Abbvie. GRF has received unrestricted honoraria from Abbvie, Gilead, MSD and GSK.

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