

Emergency Opt-Out Testing Case Study:

Greater Manchester and Eastern Cheshire ODN (January 2023)

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In 2021 the Greater Manchester & Eastern Cheshire Operational Delivery Network (ODN) commenced planning for emergency department (ED) hepatitis C opt-out testing in collaboration with multiple partners. We spoke with Tom Bills, Hepatitis C Operational Delivery Network Manager, about the planning, implementation, and results of their programme.

Planning

The project was originally initiated by the HIV team, who with their funding, aimed to provide opt-out HIV testing in the emergency department. The links between the HIV team and the Hepatitis C ODN allowed for hepatitis C testing to be integrated into that work where it became a collaboration.

Tom worked alongside Dr Javier Vilar, Consultant in Infectious Diseases, and Mark Gillyon-Powell and Georgia Threadgold from NHS England's (NHSE) HCV Elimination Programme to launch the hepatitis C element of the project with significant financial resources contributed by NHSE. Tom Bills reports that they knew of other ODNs such as West Yorkshire who had carried out emergency department testing pre-Covid who experienced great success, however, Covid had at the time, presented a great challenge.

The team drew together a working group that allowed input from all partners, ensuring all elements of the project were considered from all angles. Critical to this was the input and buy-in from staff in the emergency department. Tom spoke of how fortunate the team were to have a great working relationship with their colleagues in the laboratory and how the head of virology was an essential part of the project team.

Some teething issues were experienced and related to; delays in finalising the financial elements of the project, managing the launch of a new electronic patient record system and capacity for managing the scale of the testing within the laboratory, which is a consideration especially as the project expands. However, despite these challenges Tom commented on how everyone worked hard to resolve issues and adapt. With regards to service user consent for testing, numerous conversations took place between the project members. Risk assessments were completed, and it was agreed through governance board discussion and approval that posters would be displayed in emergency department areas.

Tom Bills

Tom Bills is the Hepatitis C Operational Delivery Network (ODN) Manager for the Greater Manchester & Eastern Cheshire ODN, and was appointed in October 2021. Tom has an extensive background knowledge of hepatitis C (HCV), having worked for other ODNs in the East Midlands in the form of the Nottingham and Leicester ODNs, and more recently within the drug treatment sector at Turning Point as Regional Hepatitis C Coordinator, prior to relocating to Manchester at the end of 2021.

Tom is data-driven and financially aware, and has a keen passion for healthcare, service development and improving patient-care. Tom is a huge advocate of sharing best practice and is an ambassador for HCV Action.

Tom's reflections:

“We were quite fortunate locally that we already had a good working relationship with the HIV and sexual health teams.”

“We knew how fruitful this could be for us locally in Greater Manchester and we did it from learning from others.”

“If people want to build on or replicate what we're doing you have to involve the emergency department staff. That is integral to making it a success. If they're not contactable, not interested or engaged, then you are going to become unstuck rather quickly.”

Implementation

In December 2021, the team took a staggered approach to implementation given that they are one of the largest NHS Trusts in the country. At this time, Manchester University NHS Foundation Trust were in the process of integrating with North Manchester General Hospital. Initially they launched at one site, launching at another three months later and then a third 6 months thereafter. Tom speaks of how fortunate they were to receive grants that supported the launch of the project but also that the project will likely be extended to Salford in the future. The weekly working group continues and Tom attributes their ability to solve issues quickly to the commitment the members have to it.

Tom recommends, that for anyone undertaking a similar project, modelling is an important element of the planning stage as this supports the level of finance, the laboratory capacity that is required and what resources may be needed to ensure service users are supported. Tom also suggests that utilising local systems from an IT perspective and linking in with the business analyst team is essential to ensuring data can be captured, analysed, and utilised effectively. The project team have a live dashboard which helps them to see results updated daily.

With regards to the patient journey the trigger used for the hepatitis C and HIV testing was when a full blood count (FBC) was requested. FBC was chosen during the modelling phase of the project because it was recognised that this was the most frequent test requested by an ED clinician at the Trust, however, other areas who have provided opt-out ED testing have used renal function as the trigger.

Greater Manchester Emergency Department Opt-Out Testing Timeline:

- **1/12/21** - Manchester Royal Infirmary
- **15/3/22** - University Hospital at South Manchester (Wythenshawe)
- **8/9/22** - North Manchester General Hospital

Tom's reflections:

“If you're in the planning stage, get finance on board and start having those discussions at the earliest available opportunity.”

“We spent a long time coming up with the associated marketing material and we've put together posters and leaflets that are very visible in the department. We do have instances where we contact individuals to disseminate positive results and they don't realise they've been tested, but cases of these are very rare.”

Results

As a result of this project, the team have found many cases of hepatitis C and HIV, both new and previously known cases. The hepatitis C treatment numbers have also contributed a significant proportion of their monthly targets as an ODN. Tom and the team are hoping to further expand the project in the near future to include hepatitis B testing in 2023. From the project so far, the team have had initial findings of 1105 positive hepatitis C antibody results and 64,043 hepatitis C antibody negative results. After accounting for where there may be multiple attendances to the emergency departments, they found there were 861 people with the hepatitis C positive antibody and 52,200 unique individuals with a negative hepatitis C antibody result. They found that hepatitis C antibody prevalence was 15 per 1000 (1.5%) and 173 individuals were hepatitis C RNA positive, giving a prevalence of about 20% (173 out of the 861).

The initial findings also show most individuals who were found to be hepatitis C RNA positive were male (66% male, 34% female). Of those people with an RNA positive result 57% were aged over 50, 24% were between the ages of 40 and 49 and 15.6% were between the ages of 30-39. Only 2.9% were younger than 30 years old. Additionally, of those with a positive hepatitis C RNA result 64.7% were white British and 12.7% were from an Asian background. What is unknown at this stage is what other healthcare services the individuals with hepatitis C RNA positive results are engaged in such as drug services. Tom and the team are also starting to build insights into the reason for ED attendance for those whose results were hepatitis C RNA positive to determine any trends. The team have support from a registrar at North Manchester who is working in a research capacity to analyse the findings.

Through utilising the live dashboard, the team can be very responsive to the need for treatment, ensuring the pathway is initiated once a notification is received.

Hepatitis C Test Results from Emergency Department Opt Out Testing	
Hepatitis C antibody negative (does not have hepatitis C)	52,200 (unique results)
Hepatitis C antibody positive (have come into contact with hepatitis C at some point – this test alone is not indicative of whether a person still has the virus currently)	861 (unique results)
Hepatitis C RNA positive (have hepatitis C now)	173 (unique results)

Of the 173 people with a hepatitis C RNA positive result, 148 required linkage to care. 117 have been seen by a specialist, of which 94 have commenced hepatitis C treatment, and 40 have already achieved a sustained viral response (SVR), indicating that treatment was successful. Invaluable to supporting people into treatment was the Hepatitis C Trust peers.

Gender and age of people found to have a hepatitis C RNA positive result

Male	66%
Female	34%
Aged over 50	57%
Aged 40 - 49	24%
Aged 30 - 39	15.6%
Aged under 30	2.9%

Some of the additional benefits of the project set-up was not having to receive an in ward referral to the service because this reduces time from the pathway, meaning that rapid treatment and engagement can take place. Additionally, the team try to mitigate further hospital appointments where there is a desire from service users to be followed up remotely. Equally, if they are in hospital they will follow up on the wards. Tom reports they constantly review how they can make the initiation of treatment as simple as possible for people, continuously coming up with the best possible care plan on a case by case basis.

Tom's reflections:

“We’ve made links with a business analyst in our IT team who’s been absolutely instrumental. We’re in a better place than we’ve ever been in terms of data. We can see trends, demographics, who is an inpatient, who isn’t, etc. It’s allowed us to be as reactive as possible be in terms of making sure that we’re facilitating access to treatment as quickly as possible.”

“We’re finding people that wouldn’t have been tested. If you’ve got the means to do this both financially and operationally, do it.”

“We can be extremely reactive. Once we’ve got that notification our first question is ‘where are they? Have they been discharged? Are they on the ward? Let’s arrange award visit. Let’s have that consultation’.”

“We can arrange medication and delivery, but it might be that we link in with the outreach team, our Community Liaison Officers, or our Hepatitis C Trust peers, all of whom have helped.”

“Some of the highlights of the project have been the launch and seeing the excitement across the working group. The first day in December of 2021 was super exciting. We all went down to the ED and witnessed the traction that it was getting and spoke to people on the shop floor.”

If you would like to discuss any aspects of this project with Tom Bills or the NHSE HCV Elimination team, please contact connect.hepculater@mpft.nhs.uk and we will be able to connect you.