

Point of Care Testing High Intensity Test and Treat Project at Cwm Taf Community Drug and Alcohol Testing Centres



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BACKGROUND:

To contribute to the elimination targets set by the World Health Organization (WHO) for viral Hepatitis, Community Drug and Alcohol Treatment centres (CDAT'S) were identified as a location which have clients most at risk for blood borne viruses (BBV) (including Hepatitis C virus (HCV)). HCV has a high prevalence in this patient group and although venepuncture BBV testing is available, refusal rates are high. Point of care testing (POCT) has become more readily available and been identified as a more acceptable testing method for service users. POCT provides rapid results which is highly suited to the turnaround time of clients' care duration to CDAT.

METHODS:

A team of POCT practitioners set up clinics at 5 CDAT centres (**Figure 1**) offering a two-tiered POCT strategy along with Dried Blood Spot Testing to screen for all BBVs. The strategy utilised Orasure, OraQuick POCT swabs to test for Hepatitis C exposure with a follow up PCR test being performed on the Cepheid GeneXpert to detect active HCV infection. A BBV history 'look back exercise' (**Figure 2**) was performed to identify past BBV exposure and to select the appropriate POCT. All clients were allocated a BBV screening appointment to offer highly efficient testing to all clients accessing service.

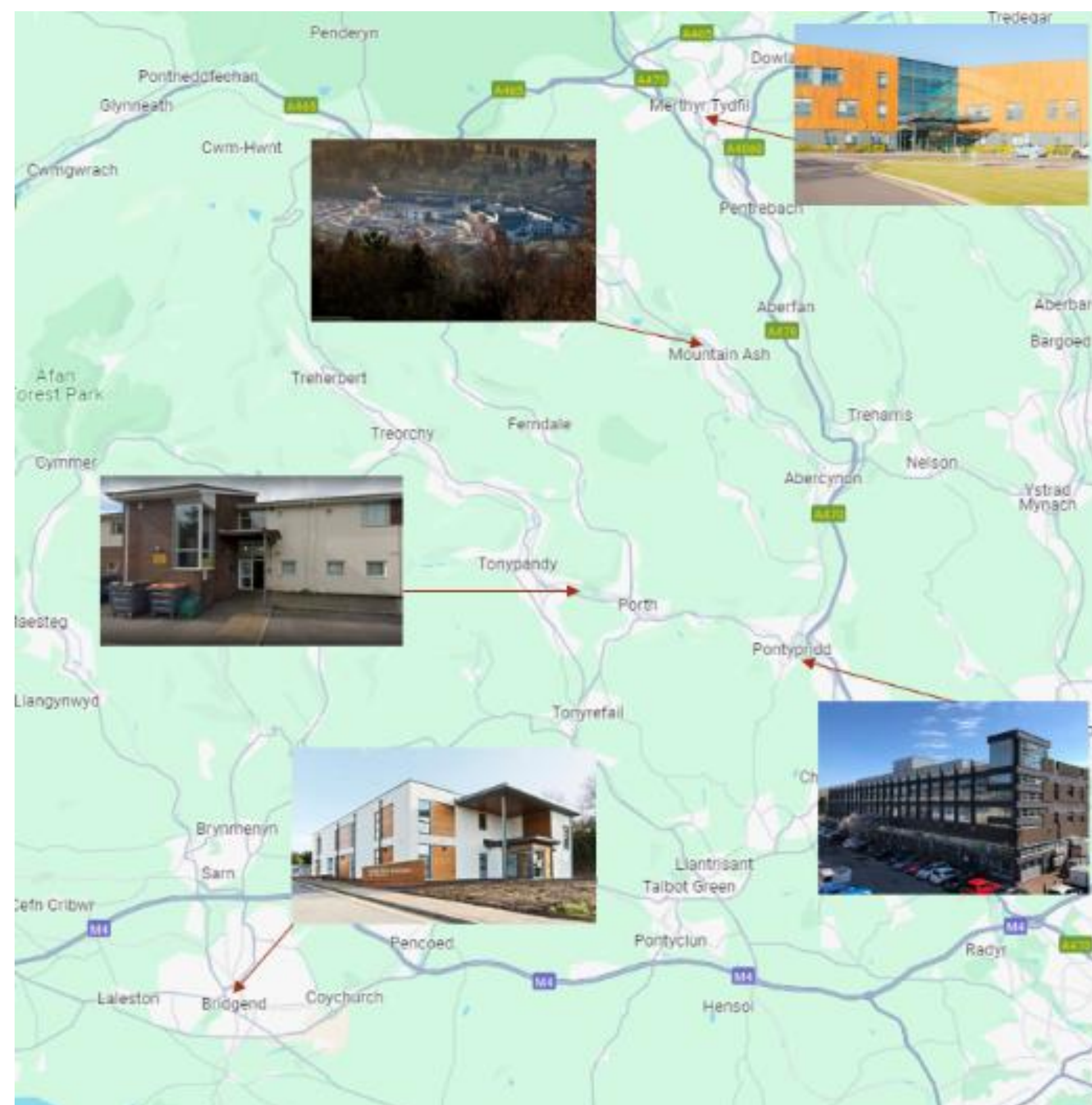


Figure 1 – Image of geographical locations of each CDAT site that the POCT project was performed at.

RESULTS:

In 32 days at 5 CDAT clinics, 557 clients were screened (**Table 1**). 1104 tests were performed in total (465 POCT swabs, 93 HCV PCR's and 546 DBST's) (**Figure 3 and Table 2**). 83.11% attendance was linked to the appointment system (**Table 3**). 10 active HCV infections were identified. The BBV 'look back exercise' revealed that 17.13% of clients had previously been exposure to HCV.

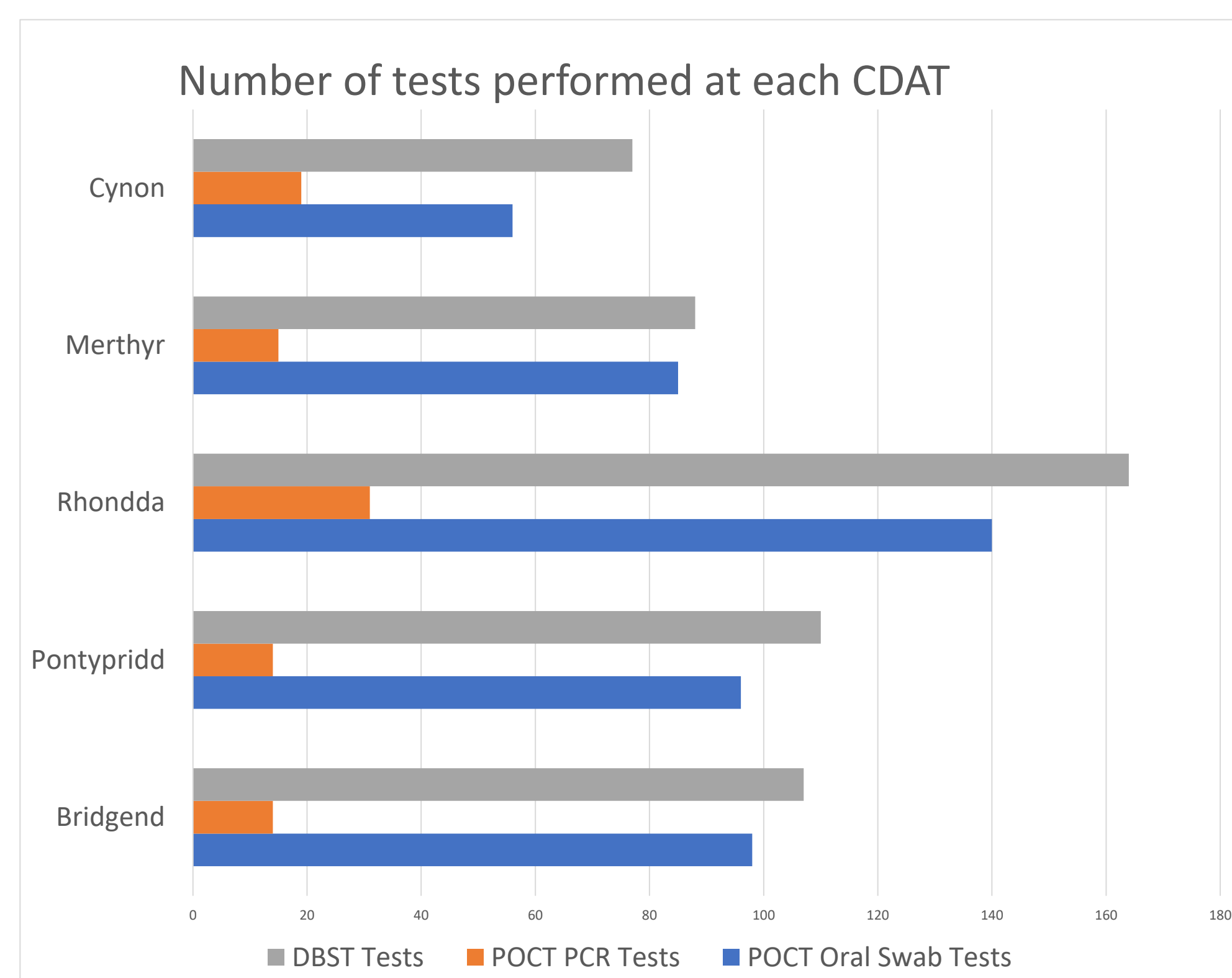


Figure 3 – Graph showing each test type completed at each CDAT site.

	Bridgend	Pontypridd	Rhondda	Merthyr	Cynon
Testing Start Date	24/07/2023	11/09/2023	10/10/2023	22/11/2023	05/12/2023
Amount of Testing Days	8	6	9	5	4
Patients booked in per hour	12	10	10	8	8
Total people on patient list	390	278	346	187	187
Total people tested	112	110	164	88	77
Percentage of people who attended due to having appointment	90.20%	89.10%	90%	98%	97%
POCT Oral Swab Tests	98	96	140	85	56
POCT PCR Tests	14	14	31	15	19
DBST Tests	107	110	164	88	77
Active Infections found	2	1	5	0	2
Treatment Status	Completed Treatment from community	Completed Treatment at HMP Swansea	1 - Completed Treatment, SVR outstanding 1 - Treatment started 3 - DNA Hospital appointment	-	On Treatment - Hospital referral

Table 1 – Statistics showing the results of projects at each CDAT site.

Test Type	Total No. tests performed
Oral Swab	465
DBST	546
Cepheid	93
Total	1104*

*For 553 patients

HCV Ab Results	POCT	DBST
Reactive	13	71
Non-Reactive	449	474
Invalid	3	1

75 patients were positive for HCV antibodies (~13.5%)
~58 patients received FastTrack testing due to 'Look back'

PCR Results	Cepheid	DBST PCR
Detected	8	10
Not Detected	85	59
Invalid	0	2

Table 2 – Total tests and results obtained after project completion.

Total Attending Patient Stats	Total
Total Tested	553 (~39.56%)
Attended for Appointment	462
Early/ Late	73
Walk in/ New	18
Did not attend Clinic	-
Percentage of patient attendance linked to Appointment letters	83.54%

Table 3 – Number of patients tested and the response to the letter system.

CONCLUSION:

The use of appointment systems and advertising a rapid, minimally invasive POCTs proved to be highly effective. High intensity screening sessions are efficient at screening many patients over a short period of time. BBV look back exercises improve patient care and ensures the correct test is selected. BBV screening at CDAT's is fundamental to achieving the WHO elimination targets.

NHS No.	Hospital No.	Surname	First Name	Date of birth	Gender	Last test date	Full Screen	Prev Test result	Where tested?
6060606066	M1000000	Bloggs	Joe	01/10/2001	M	12/06/2023	Y	3X N/R	YCC CDAT
7070707070	M2000000	Doe	Jane	19/05/1999	F	22/05/2023	Y	ACTIVE HCV INFECTION WITH NO NEGATIVE PCR	YCC CDAT
8080808088	M3000000	Bloggs	Erin	05/07/1959	F	Not on System	-	-	-
1010111010	M5000000	Doe	Eric	30/09/1964	M	04/05/2023	Y	3X N/R	OPD YCC
2020202020	M6000000	Bloggs	James	21/09/1969	M	06/04/2023	Y	PREV HCV REACTIVE WITH NEGATIVE PCR	YCC CDAT

Figure 2 – Example of look back exercise spreadsheet.

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