POINT-OF-CARE HEPATITIS C TESTING AND TREATING STRATEGY IN PEOPLE WHO INJECT DRUGS IN HARM REDUCTION AND ADDICTION CENTERS FOR HEPATITIS C ELIMINATION

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SENTENCESS

- Simplification of diagnosis, linkage to care and access to treatment are key to achieving HCV elimination.
- It is essential to establish programs that evaluate the liver disease and that guarantee global access of the PWID to DAAs therapy through the outsourcing of specialized hospital care.
- "Test and Treat" in Point-of-care to people who inject drugs in Harm Reduction and Addiction Centers is considered one of the best practices for HCV elimination and would help to achieve this goal.

BACKGROUND

According to World Health Organization (WHO) goals, elimination of Hepatitis C Virus (HCV) by 2030 requires, from a public health perspective, to enhance and simplify HCV testing to increase diagnoses, and facilitate early linkage to care and treatment in risk groups with high HCV prevalence [1].

OBJECTIVE

To assess different strategies of HCV testing, linkage to care and treatment among people who inject drugs (PWID) with chronic HCV infection in Catalonia, Spain.

METHODS

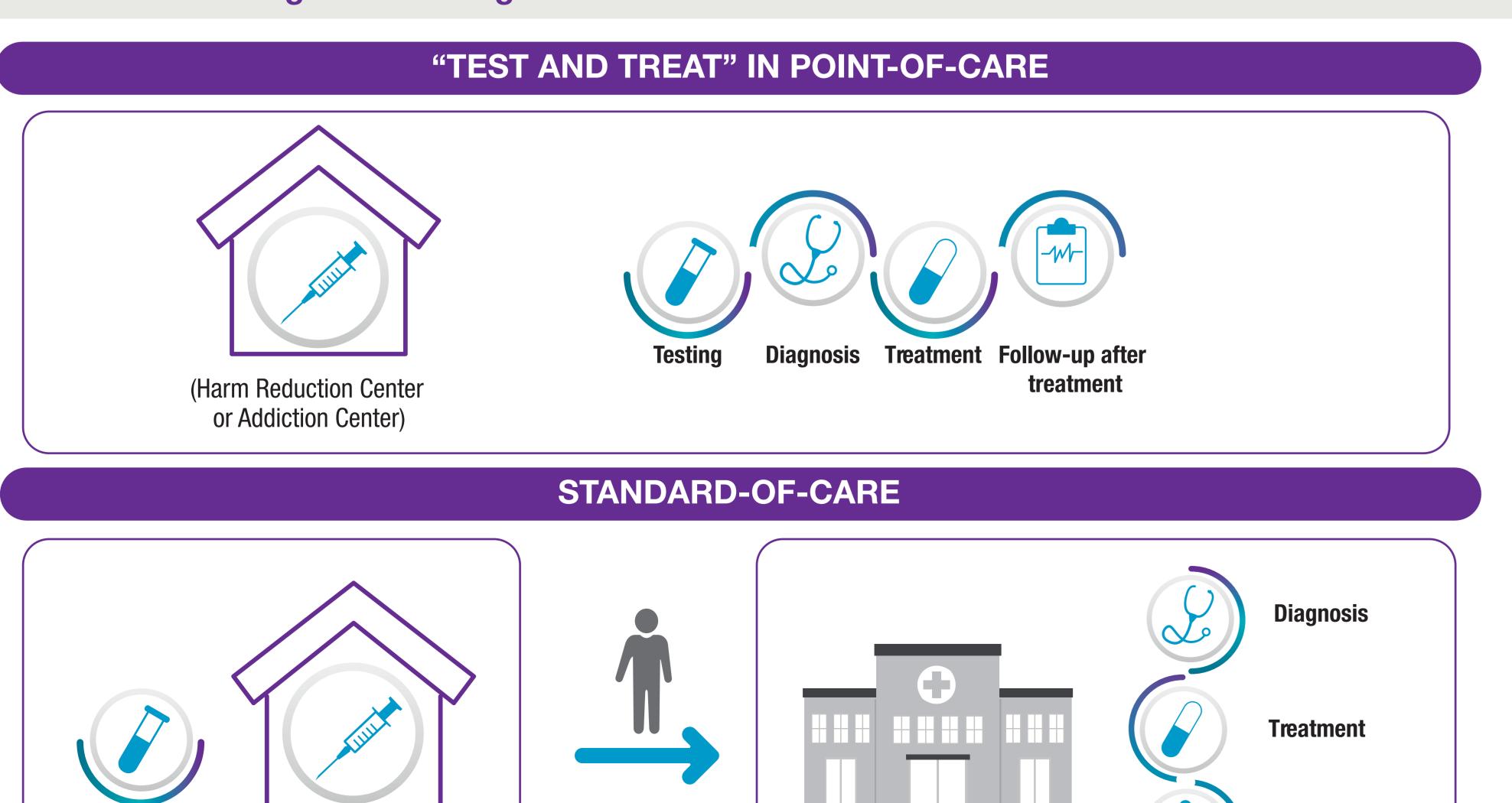
• Two strategies were evaluated in the analysis (Figure 1):

(Harm Reduction Center

or Addiction Center)

- Point-of-care (POC) "Test and Treat": HCV screening, treatment and follow-up were performed at the same place, versus
- "Standard-of-care" (SOC): chronic HCV positive PWID were referred to the hospital to treatment and follow-up.
- These two strategies were assessed separately for two different types of centers:
- Harm Reduction Centers (HRC) with active drug users (6,878 individuals in Catalonia)
- Addiction Centers with opioid substitution therapy (13,944 individuals in Catalonia)
- The target population was collected from official sources of Catalonia [2].
- A different decision tree for each strategy was designed based on clinical practice and a multidisciplinary Expert Panel opinion.
- In both strategies, POC and SOC, the same percentage of individuals screened and HCV-RNA positive was assumed. In POC, HCV-RNA positive patients received treatment directly at the same centre without being referred to the hospital (Figure 2). In SOC, chronic patients are referred to the hospital for initiation of treatment (Figure 3). In both strategies, the treated patients could achieve sustained virological response (SVR), no SVR, or loss to follow-up (patient no returning to medical visit). In patients with SVR, reinfection was assessed.
- The analysis was developed from the Health System perspective and a time horizon of 18 months was considered.
- A literature search was carried out to obtain all the data included in the analysis (percentages of individuals, screened, with positive viral load, referral, treated, SVR and reinfection) [3-6] and information was requested from the Expert Panel on those data for which the information was not available. All data were validated by the Expert Panel and representing clinical practice in Catalonia.
- Healthcare outcomes were represented as the difference in HCV testing, linkage to care, treatment outcomes and reinfection comparing POC versus SOC, for each type of center.

Figure 1. Strategies evaluated based in two healthcare circuits



Follow-up after

METHODS

Figure 2. Cascade of testing, linkage to care and treatment for "Point-of-care"

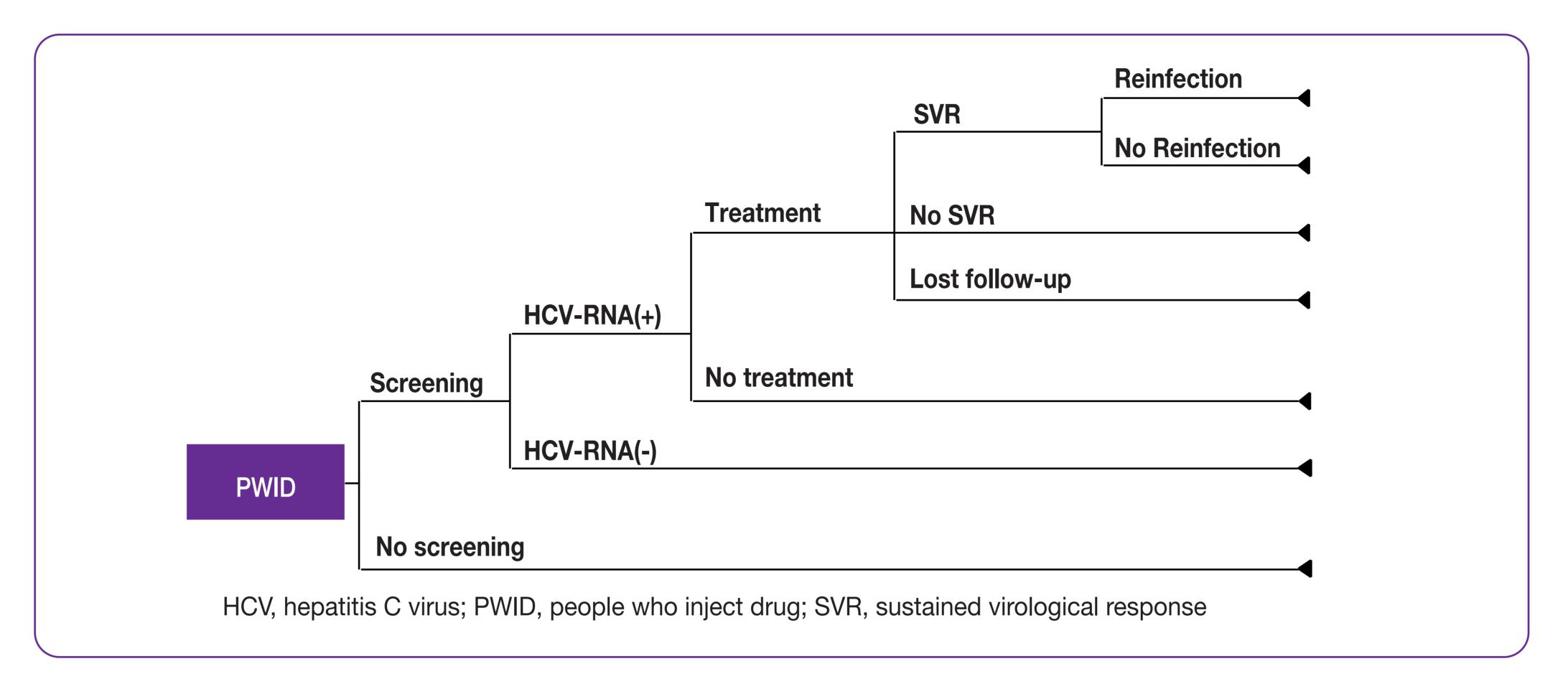
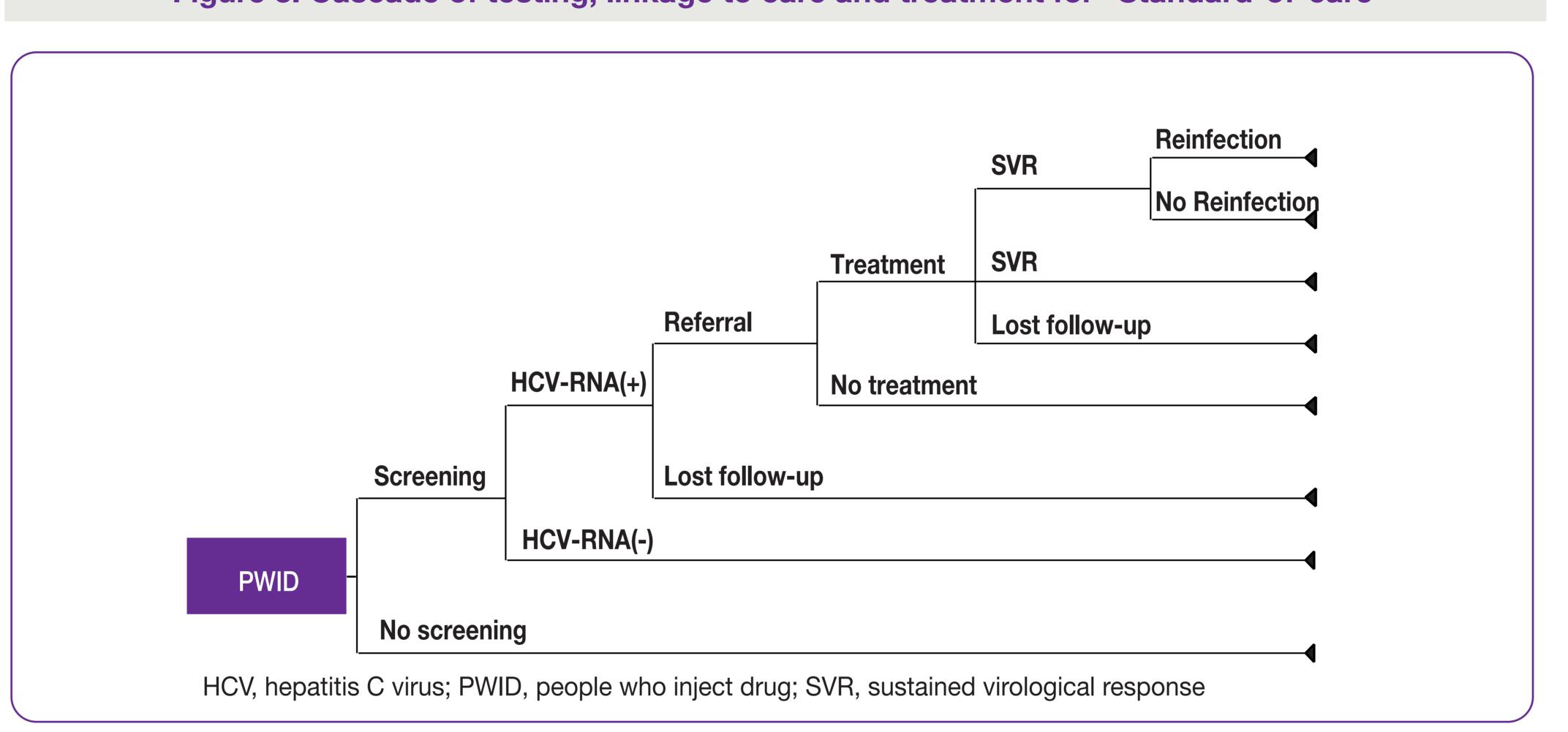


Figure 3. Cascade of testing, linkage to care and treatment for "Standard-of-care"



RESULTS

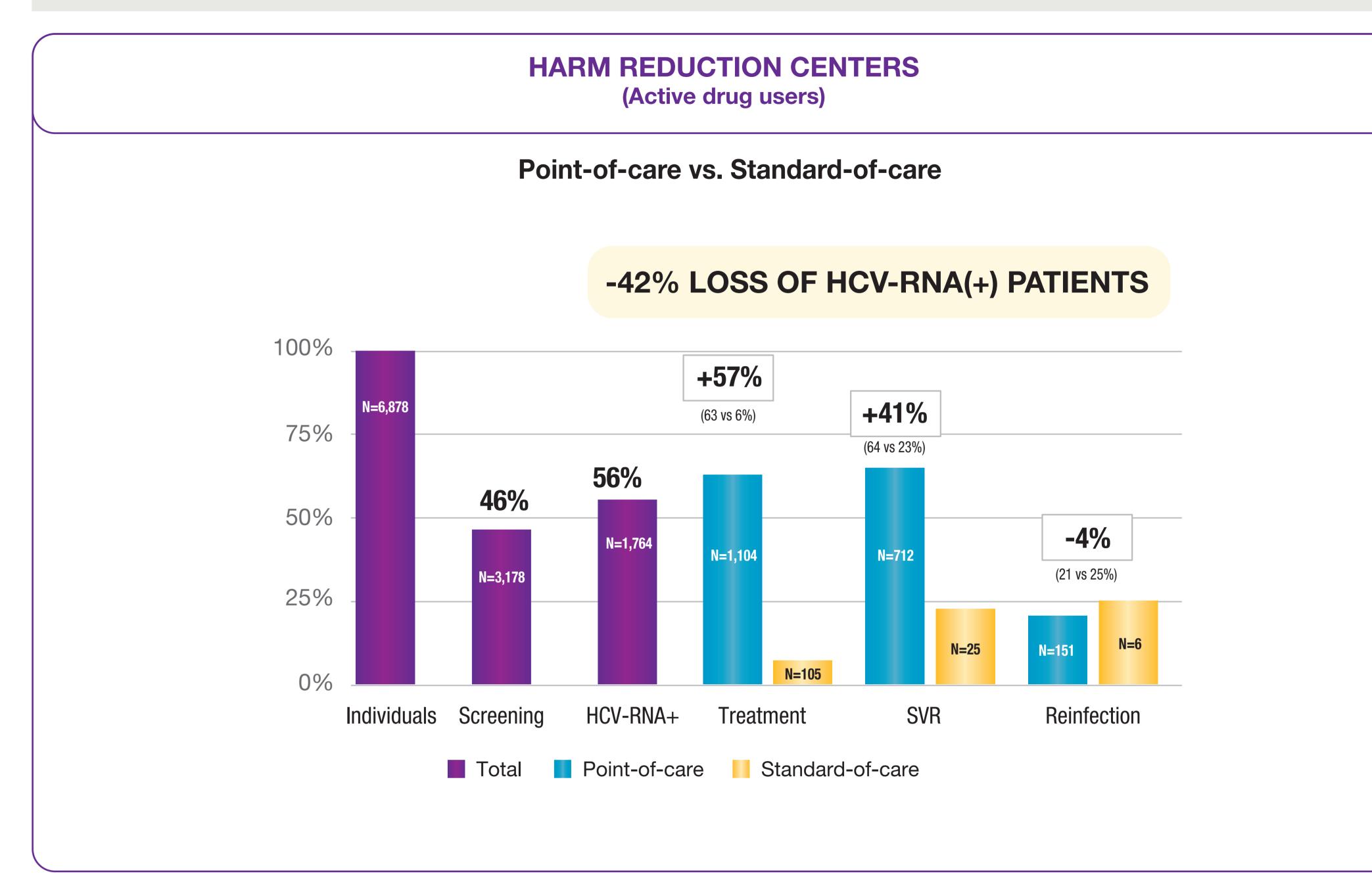
- Overall, among individuals monitored in HRC, 3,178 (46%) were screened for HCV infection. Compared to the SOC, POC increased access to treatment by 57% (63% vs. 6%). Among those who started treatment and continued, 64% vs. 23% obtained SVR, respectively. Despite of reinfection rate was 4% lower with POC compared to SOC, it remained above 20% with both strategies. In POC, the losses to follow-up were reduced by 41% (Table 1).
- In Addiction Centers, 12,717 individuals (91%) were screened using both strategies. Compared to the SOC, POC increased the access to treatment and linkage to care by 19% along with SVR at the same rate. Reinfection rates among responders decreased by 6% (Table 1).

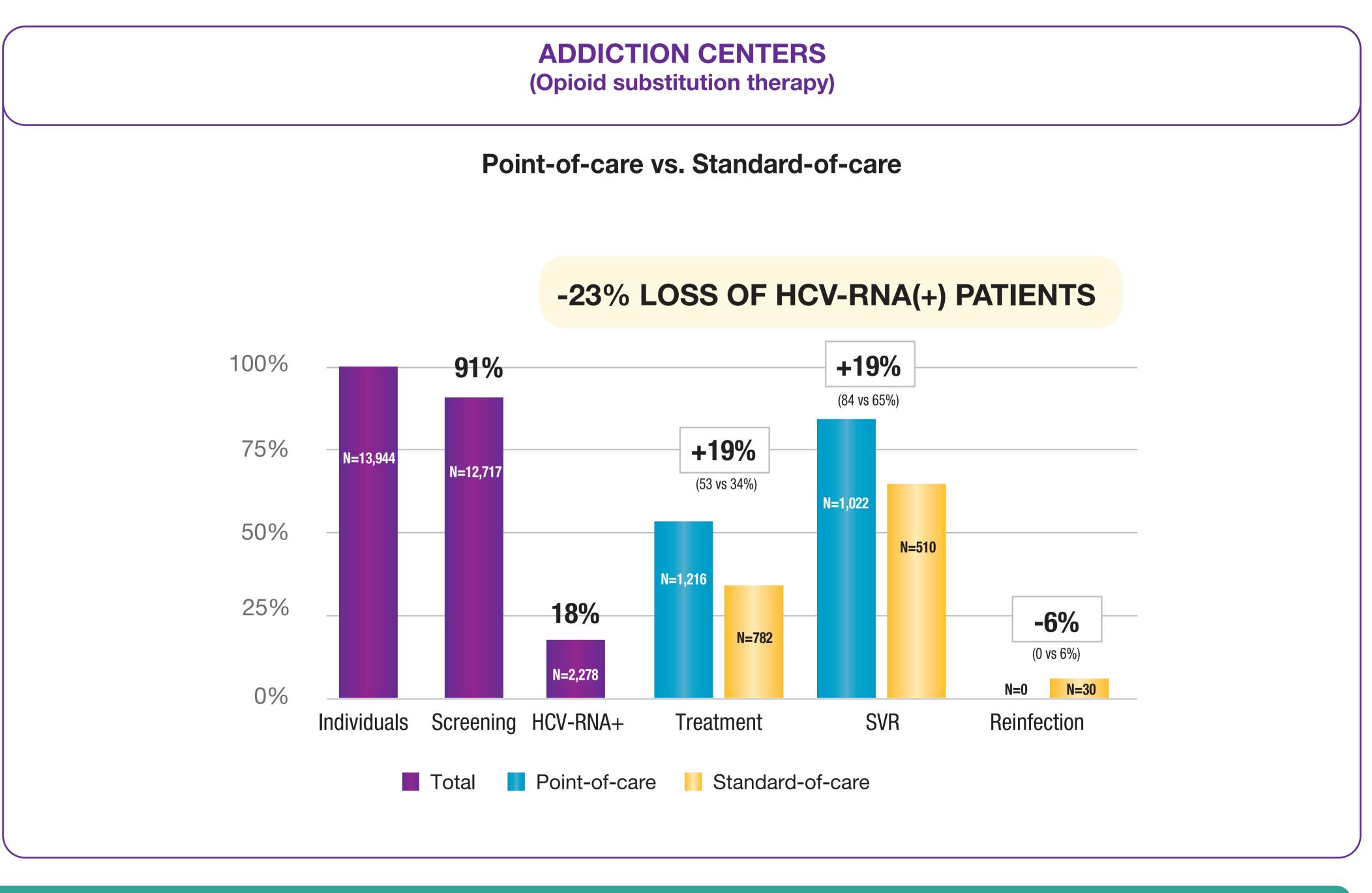
Table 1. Results of cascade of testing, linkage to care and treatment outcomes

	Harm Reduction Centers		Addiction Centers	
	Point-of-care	Standard-of-care	Point-of-care	Standard-of-care
Individuals	6,878		13,944	
Screening	3,178 (46%)		12,717 (91%)	
HCV-RNA (+)	1,764 (56%)		2,278 (18%)	
Linkage to care				
Start Treatment	1,104 (63%)	105 (6%)	1,216 (53%)	782 (34%)
Treatment				
SVR	712 (64%)	25 (23%)	1,022 (84%)	510 (65%)
No SVR	53 (5%)	5 (5%)	37 (3%)	34 (4%)
Loss follow-up	339 (31%)	75 (72%)	157 (13%)	238 (31%)
Reinfection	151 (21%)	6 (25%)	0 (0%)	30 (6%)

RESULTS

Figure 4. Results of cascade of testing, linkage to care and treatment outcomes.





CONCLUSIONS

- The implementation of Point-of-care "Test and Treat" at Harm Reduction Centers and Addiction Centers improved uptake of linkage to care, increasing access to treatment in PWID population, and has shown to be a public health effective strategy in Catalonia.
- Despite the implementation Point-of-care testing and linkage to care in HRC, SVR rates are suboptimal and reinfection remains a problem as it is associated with HRC (and consumer habits), regardless of the linkage to care strategy. New strategies are needed for this population.

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