VEND-C. Evaluating distribution of rapid HCV-antibody self-testing kits via needle/syringe vending machines: A protocol paper

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Background:
Hepatitis C virus (HCV) affects approximately 58 million people globally. The simplicity and tolerability of new treatments makes HCV elimination highly feasible, however, to realise this potential, it is imperative that sufficient people are diagnosed. Limited access to HCV testing is an international issue, with only an estimated 20% of those living with HCV aware of their status. In 2021, the World Health Organization released recommendations for HCV self-testing, stating that HCV self-testing is highly acceptable and "should be offered as an additional approach to HCV testing services".
In most international regions, people who inject drugs remain the group most at-risk of HCV infection and onward transmission. Syringe dispensing machines (SDM) provide sterile needles/syringes via anonymous vending machines and are a cost-effective means of delivering injecting equipment with 24-hour availability and may reach sub-populations who do not prefer fixed-site needle and syringe programs. SDMs may also dispense additional public health items, such as HCV self-testing kits.
Given the previously demonstrated effectiveness of HIV self-testing and the acceptability of HCV self-testing, there is a clear rationale for exploring the feasibility and effectiveness of distributing HCV self-testing kits to people who inject drugs via SDMs.

Methods:
In this paper we describe the VEND-C study protocol to dispense HCV self-testing kits through multiple SDMs in a South-Eastern region of Melbourne, Australia, including methodology, modifications to testing kits, provision of necessary information to SDM clients and project evaluation.

Results:
As an exemplar study, VEND-C provides crucial information for the replication of similar work internationally.

Conclusion:
This world-first research project will greatly inform the delivery and expansion of HCV testing modalities internationally, providing crucial data to support ongoing HCV elimination efforts.

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