Using hepatitis C infection surveillance data to optimize the care continuum in Montréal, Canada

Authors:
Cox J[1,2,3], Nuckle M[1], Chayer M-C[1], Morissette, P-L[4], Huchet E[4], Poliquin M[4], Klein M[2,3], and Gitelman, J[1].

[1]Direction régionale de santé publique-CIUSSS-CSMTL, [2] McGill University, [3] Research Institute-McGill University Health Centre, [4]Clinique l'Agora.

Background:
Hepatitis C virus (HCV) infection surveillance data, coupled with clinical information, can identify gaps in the HCV care cascade. In Montréal, Canada, we undertook a pilot program to document and advance care of HCV cases reported from 2019-2023. Preliminary results (2021-2023 cases) are presented.

Description of model of care/intervention/program:
Using notifiable diseases data and clinical information, we examined all living individuals with a first HCV diagnosis (anti-HCV+) in Montréal, 2021-2023. Cases without evidence of HCVRNA testing and HCVRNA+ individuals requiring treatment, were contacted by telephone. Potential care needs were determined and care linkage offered. Using descriptive statistics, outcomes of the program, including the proportion of cases contacted, and results of HCV care referrals (uptake of HCVRNA testing and treatment), are presented.
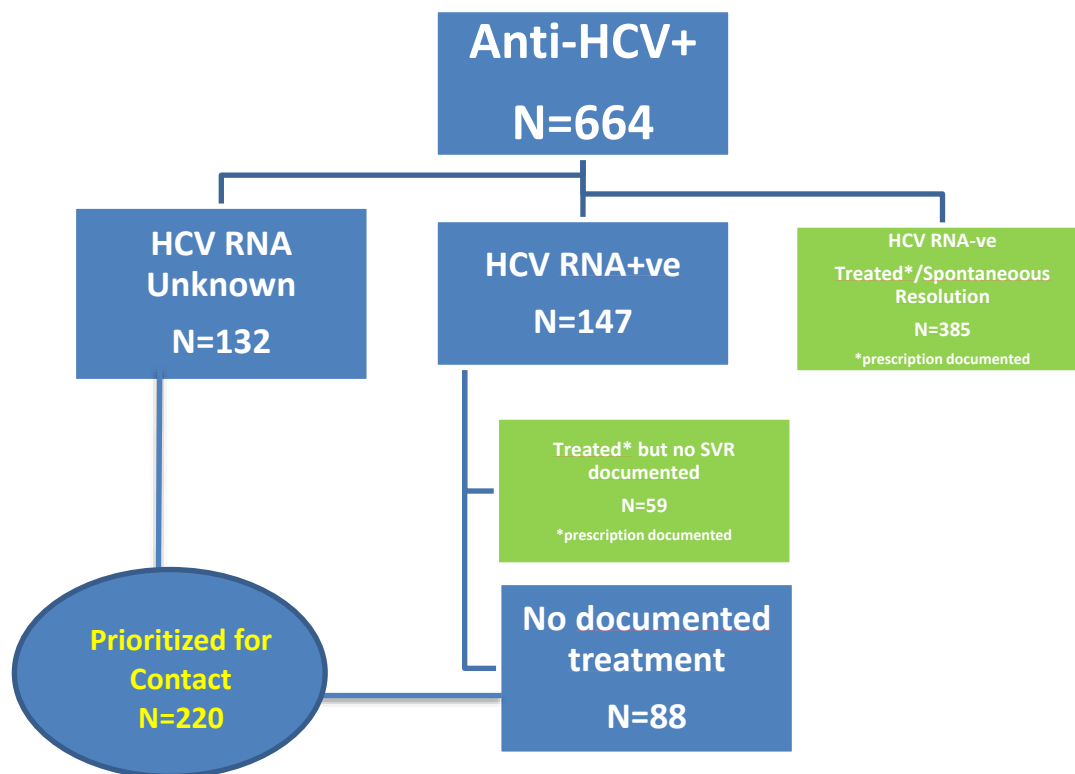
Effectiveness:
664 HCV cases were newly declared (Figure). Of these, 220(33%) needed HCVRNA testing (n=132) and treatment (n=88), and were prioritized for contact. Of successfully contacted cases (n=95(43%)), median age was 48yrs, 60% were male, and 37(39%) identified as belonging to a key population for HCV elimination. Of contacted cases, 65(68%) and 30(32%), required HCVRNA testing and treatment, respectively. Of note, 12(13%) cases were unaware of their HCV infection. 53(56%) of contacted cases accepted care linkage; including 25(47%) referred to program-related clinics. Of referrals, as of January 31, 2025, 7(28%) completed HCVRNA testing (4 +ve, 3 -ve), 3(12%) were confirmed HCVRNA+ and started treatment, and 8(32%) who were known HCVRNA+, started treatment.

Conclusion and next steps:
This program identified HCV care gaps. Implementation of reflex HCVRNA testing would minimize delays in care and cure. Success in contacting cases was modest, but adherence to new referrals appears encouraging. While a minority of cases voluntarily identified as members of a key population, the program is nonetheless relinking a group of patients to HCV care and contributing to local elimination efforts.

Figure: HCV RNA and treatment status of hepatitis C virus infection (anti-HCV+) cases declared in Montréal, Canada, 2021-2023