Effect of a single-day investigation for HCV infection on treatment initiation among PWID, before and after universal access to direct acting antivirals

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Abstract

Background: Québec provincial insurance plan restricted reimbursement of direct acting antivirals to patients with ≥F2 fibrosis or risk factors for liver fibrosis progression (e.g.: HIV, diabetes) until March 2018. Patients not meeting criteria became eligible after that date. This study investigated the impact of the delay imposed by these restrictions on treatment initiation among PWID.

Methods: PWID (≥18 years old, have injected drugs in the last year), not linked to HCV care, were recruited in a prospective evaluation of an accelerated model of care between March 2017 and May 2019. Medical evaluation, rapid HCV viral load (GeneXpert®, Cepheid)* and transient elastography (FibroScan®, Echosens) were conducted during a single visit, and patients were informed whether they could be treated or had to wait. If eligible, treatment was initiated at the second visit, after reimbursement approval. Patients not yet eligible for treatment were recontacted after March 2018, when treatment became available. Analyses were conducted using chi-square-test to compare treatment initiation proportions according to whether the treatment was delayed.

Results: A total of 94 viremic participants completed the evaluation process. Overall, 62/94 (66%) initiated treatment during the study period. Of the 59 patients enrolled before March 2018, 26/29 (89.7%) eligible for immediate treatment initiated treatment. Of the 30 not eligible seen before March 2018, 11/30 (36.7%; p<0.001) initiated treatment after the restrictions were lifted, 10/30 were reached but not treated (33.3%) and 9 were lost to follow up. Among 35 patients recruited after March 2018, 25/35 (71.4%) would not have been eligible if recruited before reimbursement criteria changes and 25/35 (71.4%) initiated treatment.

Conclusion: A single day investigation model of care was associated with 66% uptake of HCV treatment among disengaged PWID. Delaying treatment because of restrictions significantly decreased the proportion of PWID who initiated treatment.

Background

- Due to budget constraints, many jurisdictions have restricted the reimbursement of DAAs to pre-set criteria.
- Evolution of reimbursement criteria in Québec, Canada:
  - Prior to July 2015: universal access
  - July 1st 2015: F3-F4
  - March 24th 2016: ≥ F2 or poor prognosis factors (e.g.: HIV, diabetes)
  - March 1st 2018: universal access
- Due to competing needs, persons who inject drugs (PWID) are especially at risk for loss to follow-up.
- For example, in the SurvUDI network – 2015-2017, HCV prevalence among PWID was 67.4% and, while 82.8% of them were aware of their status, only 38% of them had consulted a physician within 6 months.[1]

Aim

- This study investigated the impact of the delay imposed by these restrictions on treatment initiation among PWID.

Objectives

- Evaluate, among patients initially classified as untreatable:
  - -The proportion of patients that can be successfully recontacted
  - -The proportion of patients who will initiate an HCV treatment
  - -By comparison, the treatment initiation rate between initially "eligible" and initially "not eligible" patients.

Methods

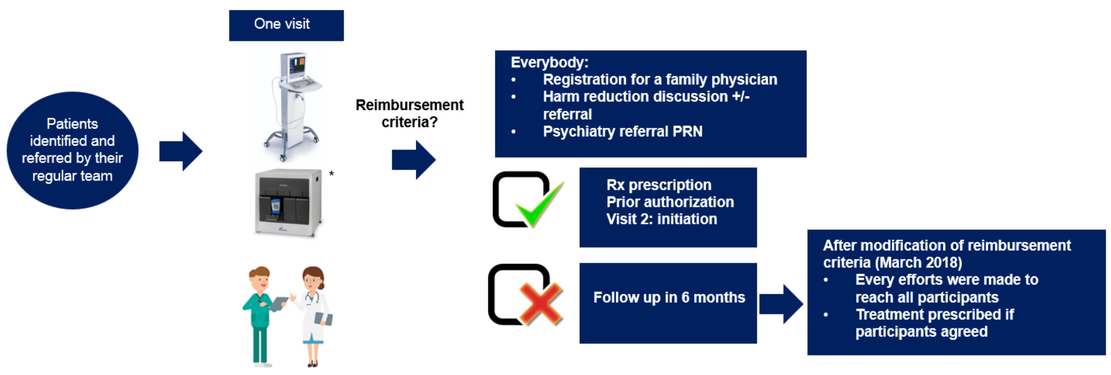
Design

Analysis of a secondary objective of a non randomized, open-labelled, prospective study (NCT02755402)

Inclusion criteria
- 18 years and older
- Able to give consent and sign the information and consent form
- Injection drug use in the past year
- HCV infected but treatment eligibility status unknown.

Exclusion criteria
- Patient is visibly intoxicated at the initial visit and is no longer able to give consent or is considered incapable of participating in the study at the investigator's discretion.
- Patient is already actively involved in hepatitis C management.
- Women who are pregnant, nursing or who want to become pregnant.
- Patient has a defibrillator or pacemaker.

Intervention



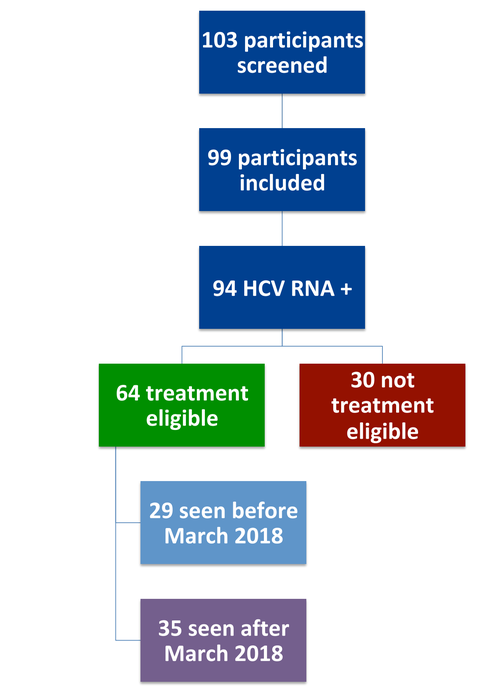
Analysis

- Groups were compared using chi-square test.
  - -Overall initiation rate:
    - All participants deemed eligible vs. non eligible at first visit

Disclosures

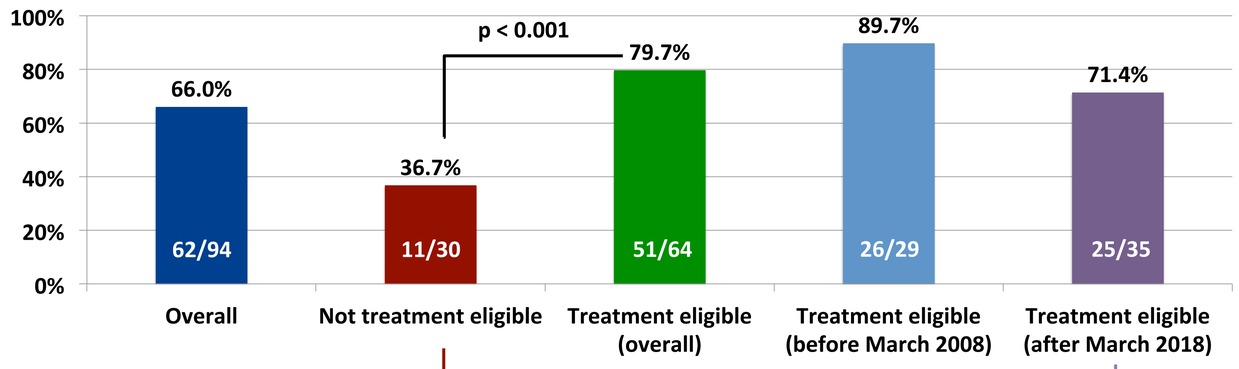
This study was funded by Gilead. Cepheid lent the GeneXpert machine.
VML is funded by Chercheur-boursier clinicien Junior 1 – FRQ-S.
*Xpert HCV viral load: CE-IVD. Not available in all countries. Not available in the United States or Canada.

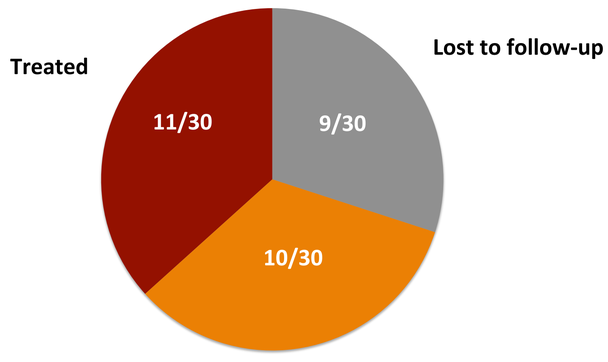
Results



	Eligible patients (N =64)	Not eligible patients (N=30)	p-value
Age, median (IQR)	44 (35-51)	40.5 (33.3-46.8)	0.22
Gender, male (%)	54 (84.4%)	26 (86.7%)	1.00
Homelessness (%)	15 (23.4%)	11 (36.7%)	0.22
Injection in the last month (%)	52 (81.3%)	20 (66.7%)	0.13
Stimulants use in the last month (%)	42/61 (68.9%)	16/28 (57.1%)	0.34
Opioids agonist therapy (%)	23 (35.9%)	12 (40%)	0.82
HCV genotype 1 3 Other (2, 4, multiple)	 33 26 5	 17 12 1	NA
Fibrosis, ≥ F2 (%)	28/64 (43.8%)	0 (0%)	NA
Motivation regarding treatment (scale: 1-10), median (IQR)	10 (9-10)	10 (8-10)	0.65

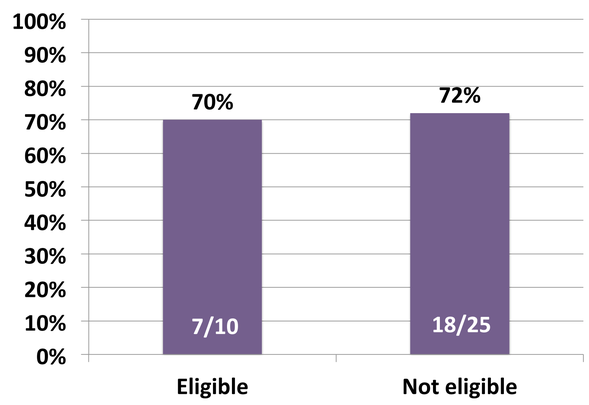
Patients who were not eligible at the first visit were significantly less likely to initiate treatment





Reached but not treated
- 5 moved or started care in other sites
- 2 did not complete medication insurance process
- 2 wanted to delay treatment
- 1 withdraw consent

After March 2018, treatment initiation rates were similar between patients who would or would not have been eligible if they had been seen before March 2018



Conclusion

- A single day investigation model of care was associated with 66% uptake of HCV treatment among disengaged PWID.
- Delaying treatment because of restrictions significantly decreased the proportion of PWID who initiated treatment.
- Change in eligibility criteria, resulting in access to treatment for healthier patients, does not explain the difference.

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References

1.Institut National de Santé Publique du Québec, Réseau SurvUDI 1995-2017, available at: https://www.inspq.qc.ca/espace-itss/reseau-survudi-1995-2017.
2. Pictures:
hepatoweb.com/Documents_PDF/Plaquette_Fibroscan.pdf
fr.wikipedia.org/wiki/Fichier:GeneXpert_lightbox.jpg
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