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Decentralized testing and treatment of hepatitis C in people who inject drugs – the Shared Addiction Care Collaboration (SACC) project

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Background

- People who inject drugs (PWID) account for around 60-85% of all Hepatitis C Virus (HCV) infections in Denmark[1]
- Previous data has shown that multidisciplinary interventions are needed to increase the number of PWID who are screened, diagnosed and treated for HCV[2]

Aim

- The aim of the Shared Addiction Care Collaboration (SACC) project was to develop and integrate a new model for decentralized testing, evaluation and treatment of hepatitis C for PWID at addiction treatment centres (ATCs) in Copenhagen, Denmark

Method

- The SACC project was a three-year project between June 2014 and June 2017
- Performed as a collaboration between the Social Services Administration in Copenhagen, the Department of Infectious Diseases at Copenhagen University Hospitals, Rigshospitalet and Hvidovre, and Centre of Excellence for Health, Immunity, and Infections
- Ten ATCs were included in the SACC project (Figure 1)
- Approximately 2,000 individuals were enrolled for drug treatment at any given time

Figure 1. Included addiction treatment centres

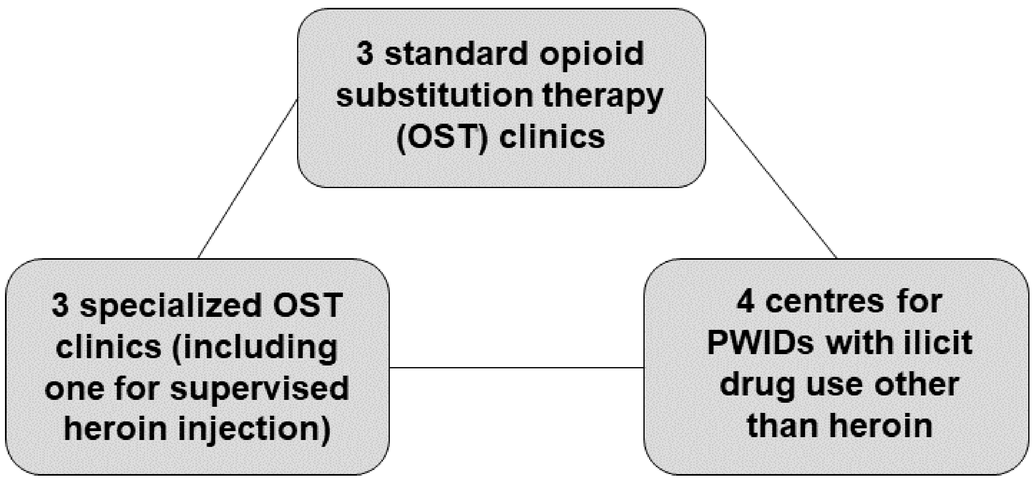
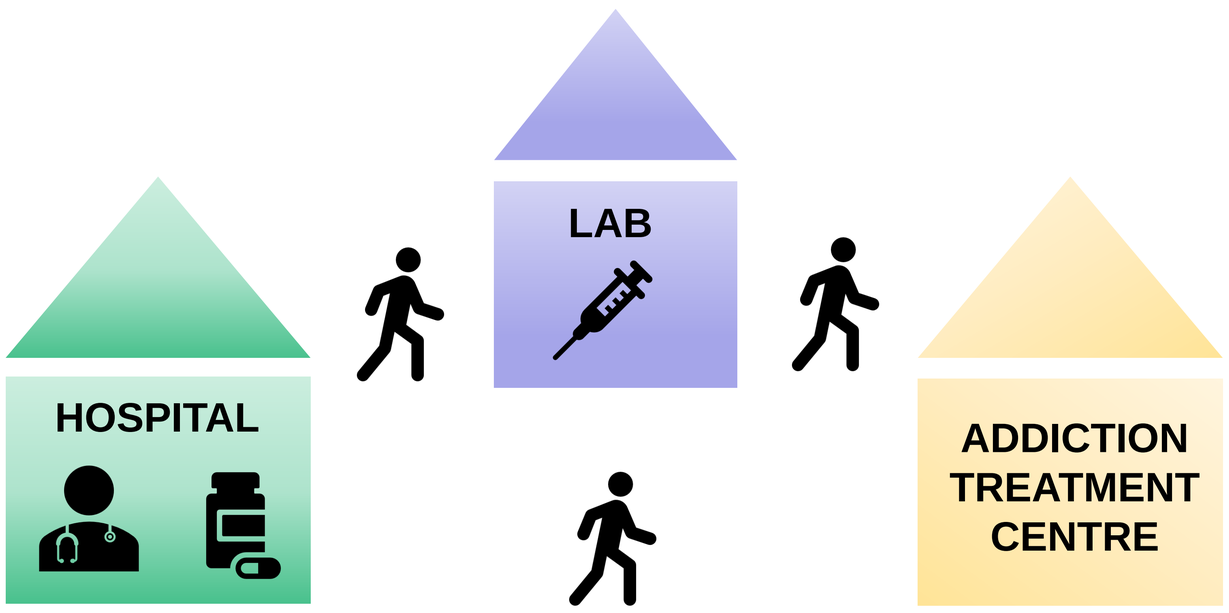


Figure 2. Before Shared Addiction Care Collaboration (SACC)



Results

- All clients newly enrolled in drug treatment at ATCs are offered screening for viral hepatitis
- Prior to SACC were clients referred to a laboratory for blood testing and hepatitis C treatment took place at specialized hospital departments (Figure 2)
- A SACC database containing eg. laboratory data, patient information, comorbidities, HCV treatment and adherence evaluation has been created and serves as a patient chart and tool for communication
- In SACC, all patient contact regarding HCV infection takes place at the ATCs in close collaboration with the specialized hospital departments (Figure 3)
- During the project period the number of enrolled clients at ATCs who were screened for HCV increased by 27% and has further increased by 34% in 2020 (Figure 4)
- A total of 220 patients have been treated for hepatitis C at ATCs from 2015 – 2023
- Only three (1%) patients experienced treatment failure. Two patients were successfully retreated while one patient deceased before retreatment
- Three (1%) patients were later reinfected. Two patients were successfully retreated while one patient spontaneously cleared the infection

Figure 3. Roles and responsibilities in the SACC HCV model

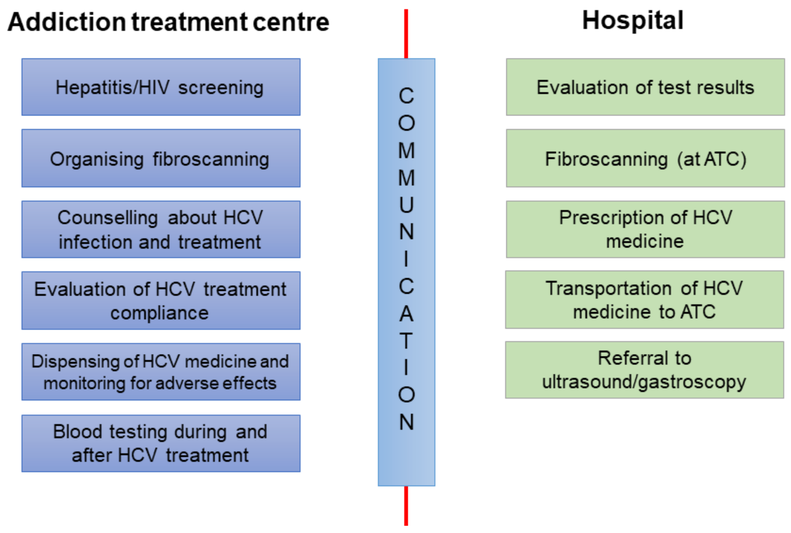
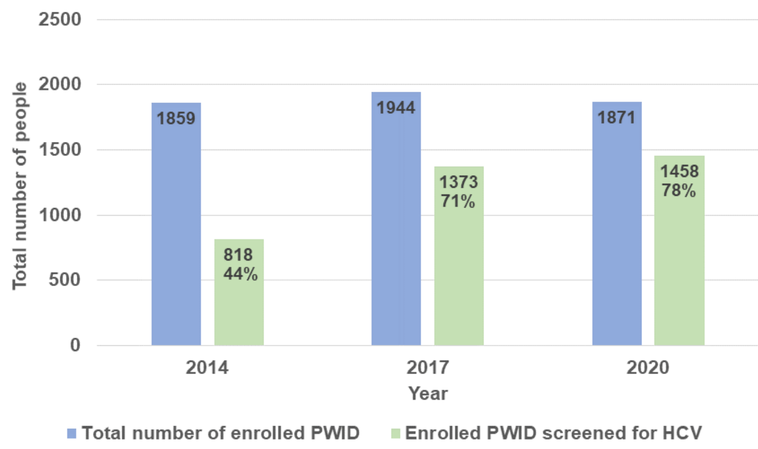


Figure 4. Enrolled people who inject drugs screened for hepatitis C



Conclusions

- The SACC model for decentralized HCV testing and care of PWID in ATCs in Copenhagen has successfully transitioned from project into routine care with increased and sustained high HCV testing rates in a vulnerable patient group
- The hepatitis C treatment success rate was high and very few patients experienced treatment failure

References

[1]Christensen PB, Hay G, Jepsen P, Omland LH, Just SA, Krarup HB, *et al.* Hepatitis C prevalence in Denmark -an estimate based on multiple national registers. *BMC Infect Dis* 2012; **12**:178.

[2]Bajis S, Applegate TL, Grebely J, Matthews GV, Dore GJ. Novel Hepatitic C Virus (HCV) Diagnosis and Treatment Delivery Systems: Facilitating HCV Elimination by Thinking Outside the Clinic. *J Infect Dis* 2020; **222(Supplement_9)**:S758-S772.