# InfCare Needle Syringe Program (InfCare NSP), a database for following and reducing injection risk behavior over time in PWID in Stockholm

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### **Background**

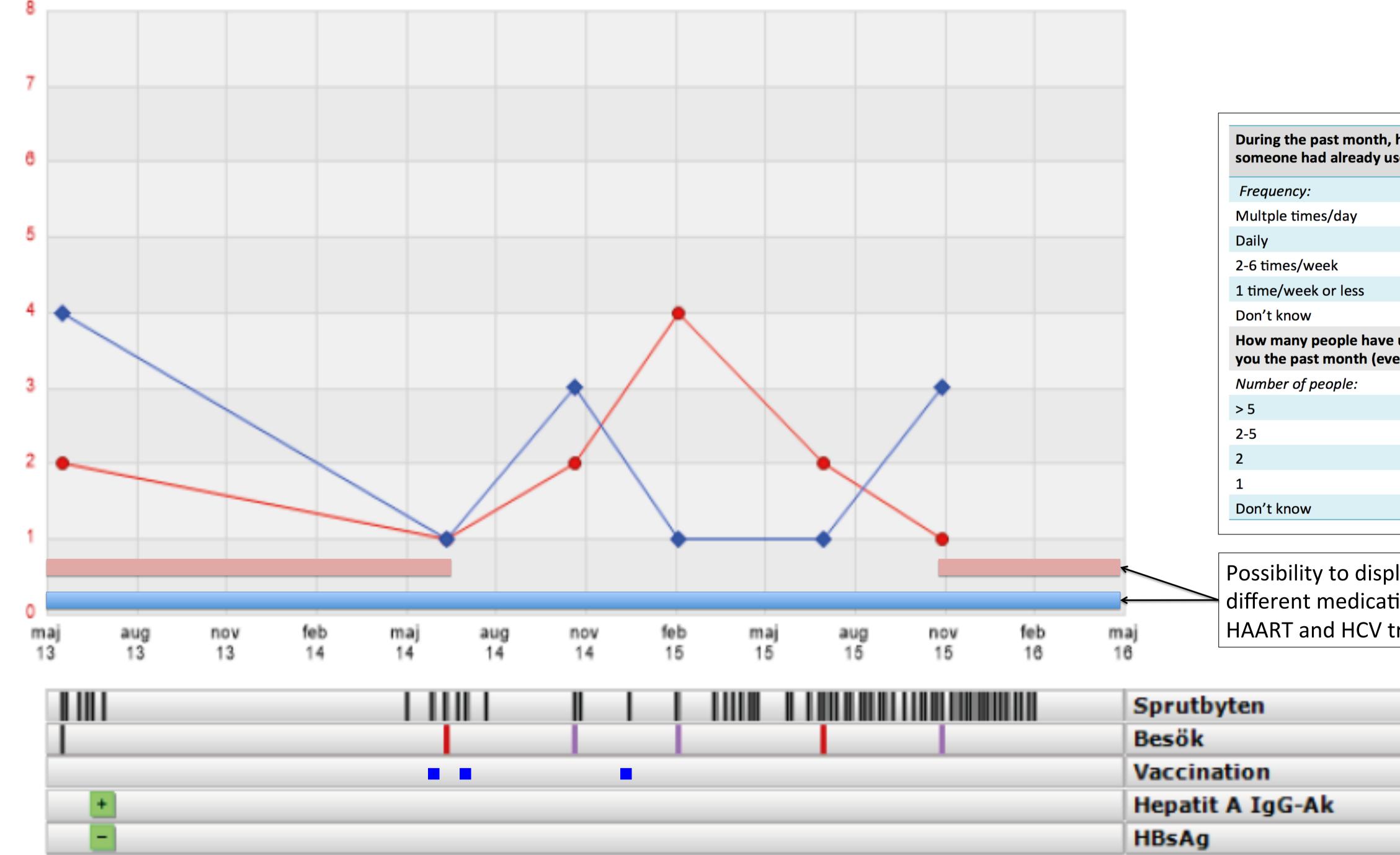
- The first needle syringe program (NSP) was introduced in Stockholm in 2013.
- Simultaneously, the database InfCare NSP was introduced which is also a clinical decision support tool for collecting and presenting data on participants' injection risk behavior, HIV- and hepatitis status and vaccination status over time.
- Data are displayed in a graph on both individual and group level.
- Since the introduction of InfCare NSP in Stockholm, five of totally seven NSPs in Sweden have implemented InfCare NSP with a future aim to cover the whole nation and achieve status of National Quality Register.

### Method

- At enrollment all individuals participated in a questionnaire-based interview, responding to 34 questions including baseline demographics (country of birth, level of education, marital status, housing conditions and employment).
- Further questions were regarding past and on-going drug use, injection- and sexual risk behaviour, contacts with health care services, social services and prison and prohibition services.
- Every 3-6 months questions on injection risk behavior were repeated both in regards to needle/syringe sharing as well as sharing other drug paraphernalia (cookers/filters/drugs).
- •All patient were tested for HIV and hepatitis A, hepatitis B and hepatitis C.

## PatientId:

### Riskbeteende antal(\*) frekvens(\*)



Puring the past month, have used a needle or syringe that someone had already used before you (even if it was cleaned)?

Frequency:

Multple times/day

Daily

2-6 times/week

1 time/week or less

Don't know

How many people have used the same needle and syringe before you the past month (even if it was cleaned)?

Number of people:

> 5

2-5

3

2

1

1

Riskbeteende (antal)

Possibility to display bars in different colours representing different medications (e.g. Methadone, buprenorphine, HAART and HCV treatment) over time.

Bars showing information on visits, questionnaires, vaccinations and serological markers.

# Results

- Among the first 1504 patients enrolled in the Stockholm NSP, the prevalence of HIV, hepatitis C (HCV) and hepatitis B (HBV) was 6.7%, 82.2% and 2.1% respectively. The overall HCV RNA-positive level was 62.1%.
- 552 of these patients were enrolled in a more extensive analysis where injection risk behavior was analyzed over time. The results showed significantly decreased risk behavior over a 12-24 month period, 2.62 1.52 (p<0.05).
- Subgroups with the highest risk behavior (females, amphetamine users and homeless) showed the highest level of risk reduction score, 3.79 1.7 (p<0.05), 3.27 1.97 (p<0.05) and 3.84 2.5 (p<0.05) respectively.

# Discussion

• The graphic presentation of data registered in InfCare NSP gives an overview of actual risk behavior and serology status which facilitates interaction with patients with the intention to reduce risk behavior to achieve a reduction of HIV and hepatitis C incidence over time.

Hepatit C antikroppar

HIV Antikroppar

**HCV PCR** 

• InfCare NSP can also effectively be used as a clinical support tool to monitor HIV, HCV and HBV in PWID before, during and after antiviral treatment.

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