

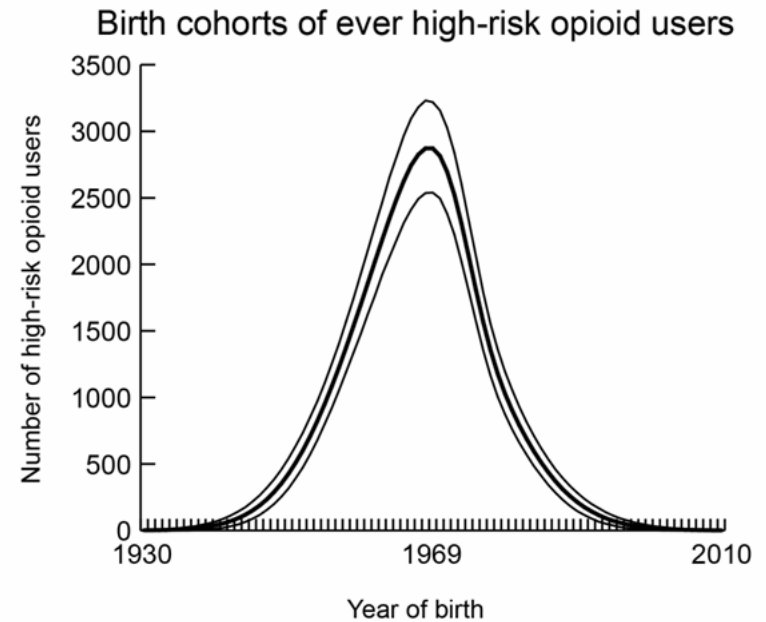
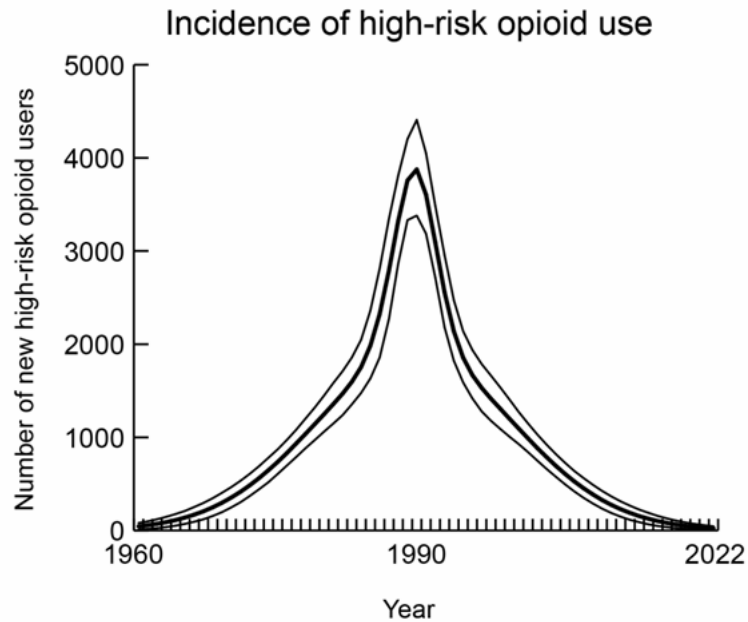
Prevalence of injecting and non-injecting high-risk opioid use in Switzerland over three decades: understanding associations with opioid agonist treatment and needle and syringe programs

Dr. phil. Carlos Nordt

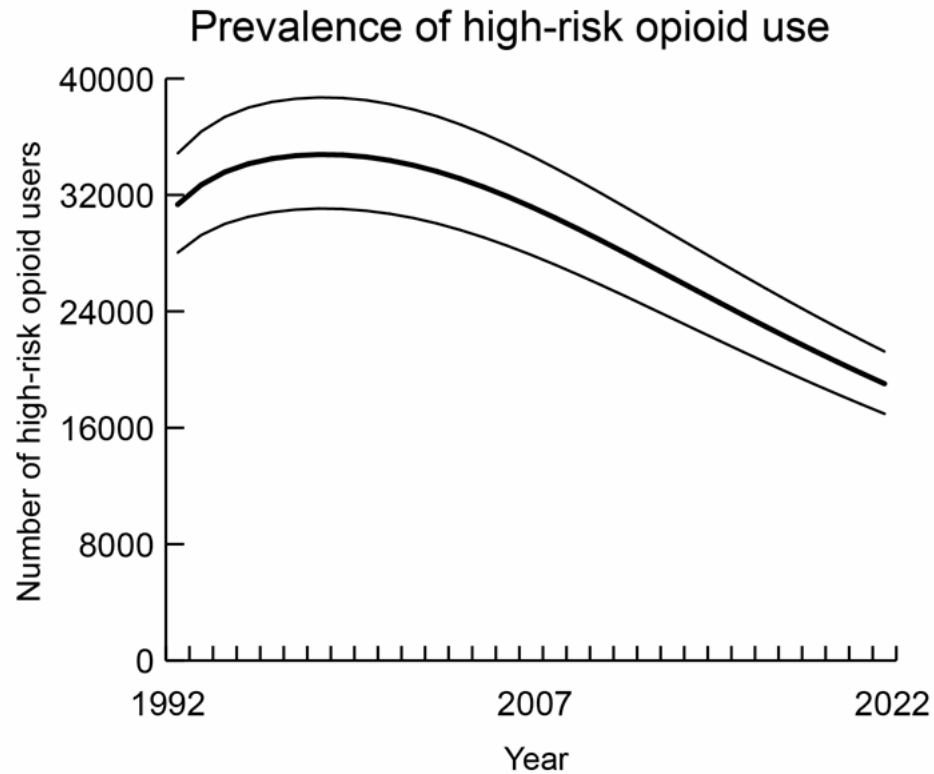
- Opioid agonist treatment (OAT) can reduce heroin use, crime and mortality in high-risk opioid users (HROU)
- Both OAT and needle and syringe programs (NSP) can reduce risk of HIV and HCV infection in people who inject drugs (PWID)
- Surveillance of these measures is often insufficient due to lack of prevalence estimates
 - OAT coverage (percentage of HROU or PWID attending OAT in a given year)
 - NSP coverage (annual number of needles and syringes distributed per PWID)

- 11 895 patients entering OAT in the canton of Zurich, 1992-2015
- Year of first regular opioid use was known for 7 500 patients
- Year of birth was known for all 11 895 patients
- OAT participation was known between 1992 and 2015
- 20.0-21.5% of all OATs in Switzerland were provided in the canton of Zurich
- Parametric nonlinear models using PROC NL MIXED in SAS 9.4

Incidence estimates of high-risk opioid use, Switzerland

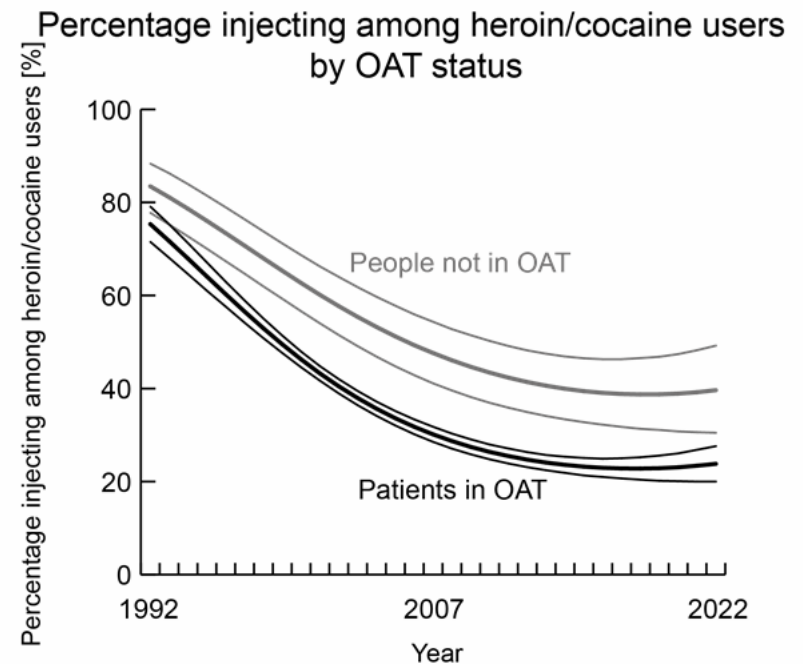
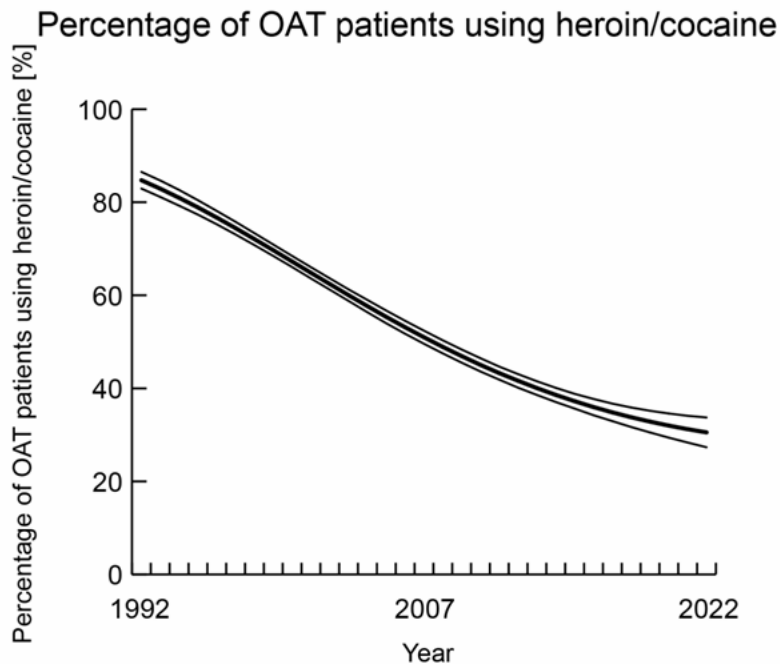


Prevalence estimates of high-risk opioid use, Switzerland

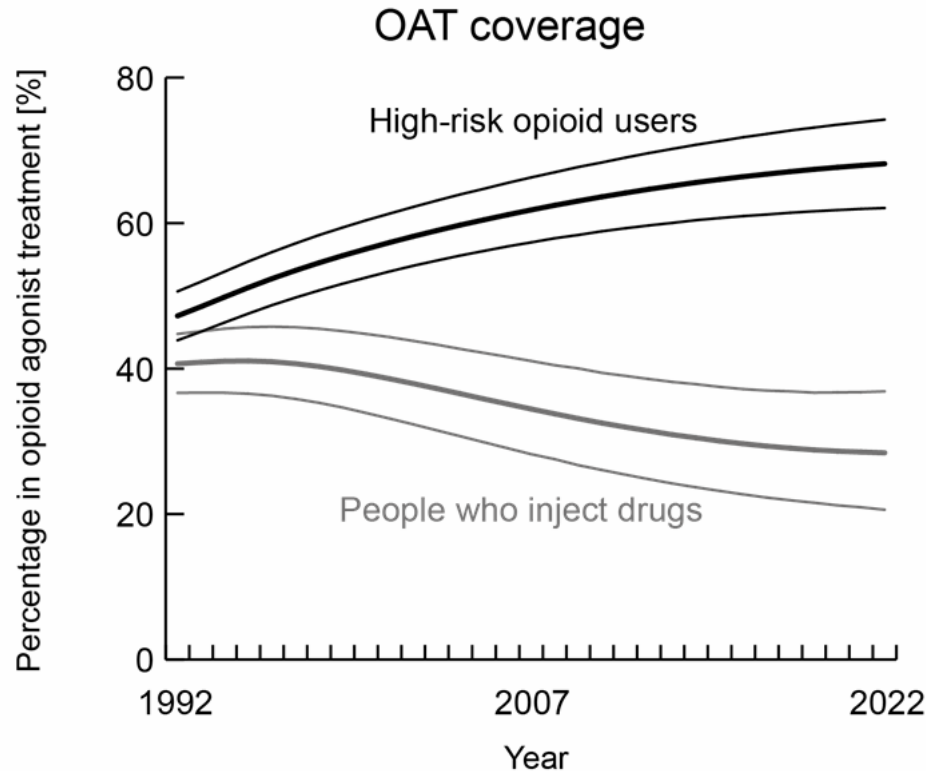


- Frequency of heroin/cocaine use over the previous 30 days of 9 043 patients in OAT 1998-2017 (121 348 data points)
- Route of administration of heroin/cocaine over the previous 30 days of 7 310 patients in OAT 1999-2017 (53 949 data points): injecting, sniffing, or smoking
- Joint parametric cumulative logit model using PROC NL MIXED in SAS 9.4

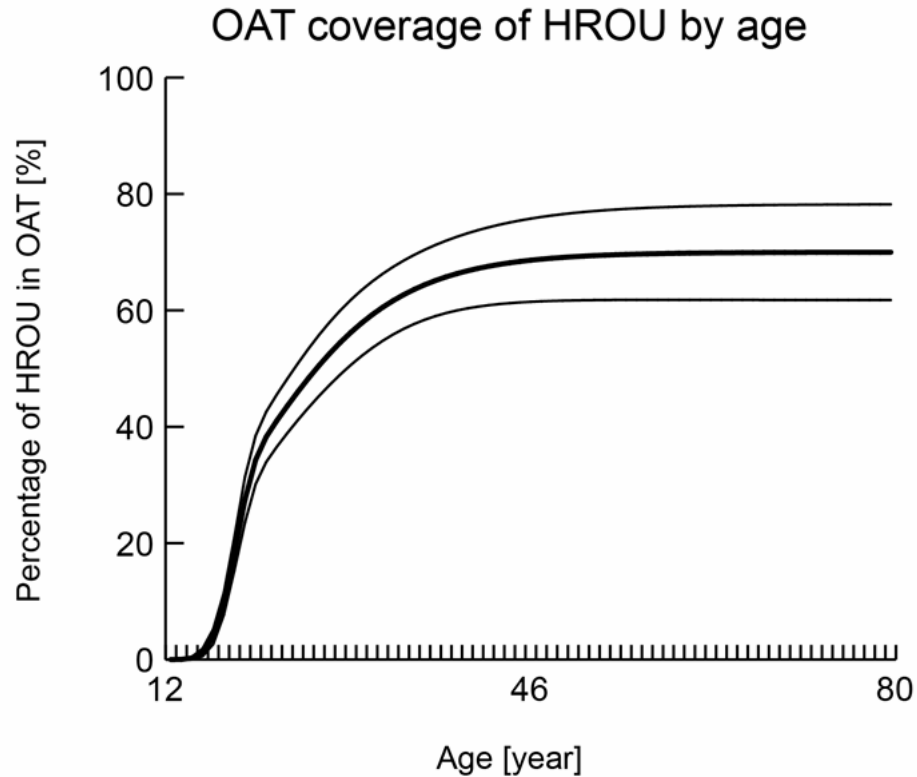
Percentage of patients using heroin/cocaine and percentage of injecting heroin/cocaine over the previous 30 days by OAT status



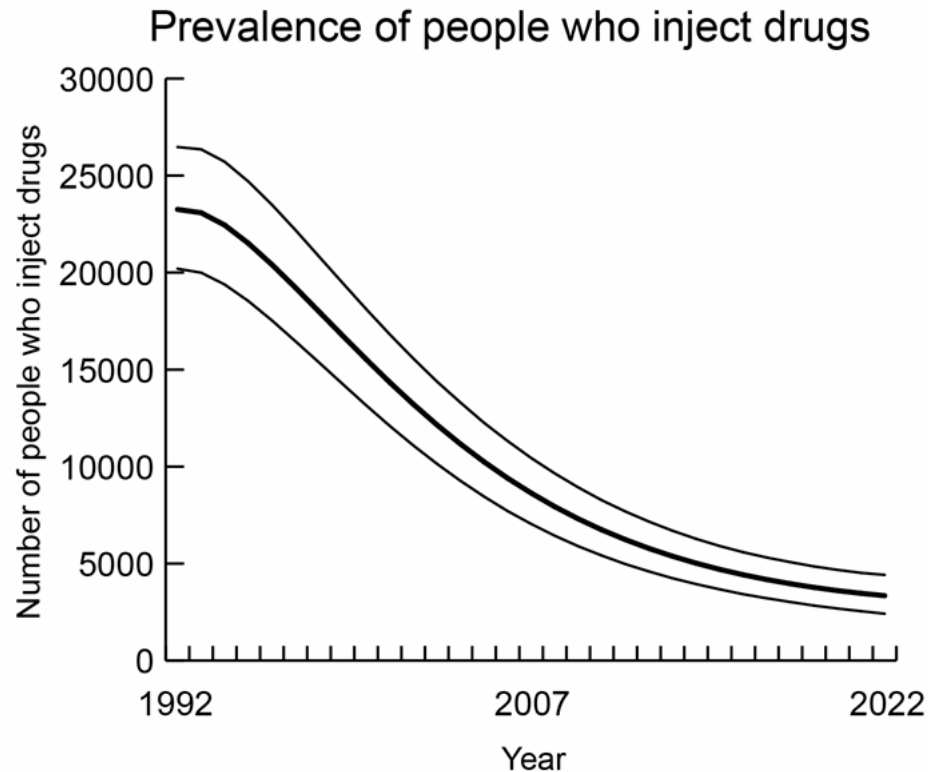
OAT coverage of high-risk opioid user and of people who inject drugs



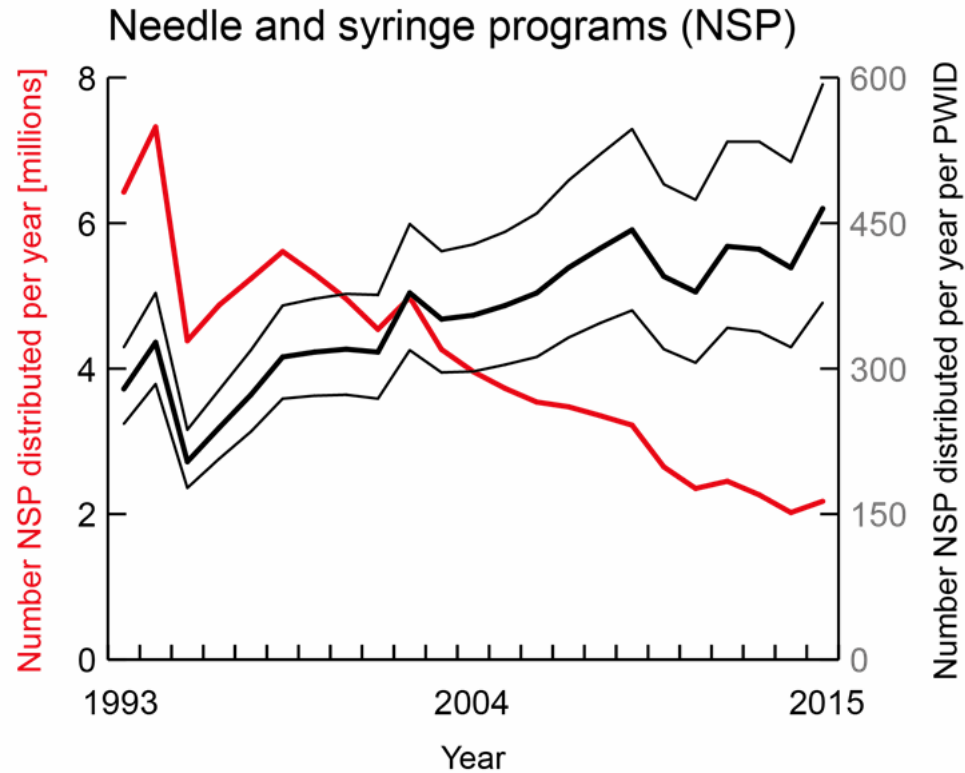
OAT coverage of HROU by age



Prevalence estimates of people who inject drugs, Switzerland



Needle and syringe coverage, Switzerland



Conclusion



- The substantial decline of PWID prevalence was driven mainly by three processes:
 - A general decline over time of injecting heroin/cocaine
 - A strong decline of OAT patients consuming heroin/cocaine at all
 - Decreasing frequency of heroin/cocaine use in OAT additionally reduced injecting prevalence
- In line with these processes, OAT coverage increased among HROU but decreased among PWID
- Notably, the increase in OAT coverage of HROU from 47% in 1992 to 66% in 2015 was an effect of an aging HROU population
- NSP coverage increased from 280 in 1993 to 465 in 2015, despite decreasing annual numbers of NSP distributed in Switzerland

Co-Authors



Psychiatric
University Hospital Zurich

- Marc Vogel, Lucas Wiessing, Erich Seifritz, Marcus Herdener

Thank you for your attention

