

How to target high-risk populations

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A graphic consisting of a red circle partially overlapping a larger, lighter grey circle.

Strategietreffen Virushepatitis
in Deutschland eliminieren

Elimination of Viral Hepatitis in
Europe: **the German strategy**

A dark green horizontal bar at the bottom of the slide, featuring three white semi-circular shapes on the right side.

Conflicts of Interest

- Consultant or speaker for AbbVie, BMS, Gilead, Janssen, MSD, Roche, ViiV
- Clinical trials for AbbVie, Gilead, BMS, ViiV, Hologic, Janssen, MSD, Boehringer-Ingelheim

Hepatitis C – what are the high-risk populations

Study population	Study	Year	N	Anti HCV prevalence (%)
General population ¹	German Health Interview and Examination Survey for Adults DEGS	2008-2011	7,047	0.3%
Migrants ^{2,3}	Study among non-native patients (8 primary care centres)	2010-2012	1,313	1.9%
	Study among migrants in 42 internal med. or hepatology centres	2008-2010	8,009	5.8% - 6.3%
HIV-co-infected MSM ⁴	HIV-1 Seroconverter Cohort Study	Study cohort since 1997	1,945	8.2%
PWID ⁵	Drugs and chronic infectious diseases DRUCK-Study (8 German cities)	2011-2014	2,077	42% - 75%
Prison inmates ⁶	Study among prison inmates, 6 prisons in 3 German federal states	2006-2007	1,515	20.6%

¹ Poethko-Müller et al. *Bundesgesundheitsblatt* 2013 ² Heidrich et al. *J Eur Gastro & Hep* 2014

³ Buggisch et al. *EASL conference* 2013

⁴ Jansen et al. *PLoS ONE* 2015

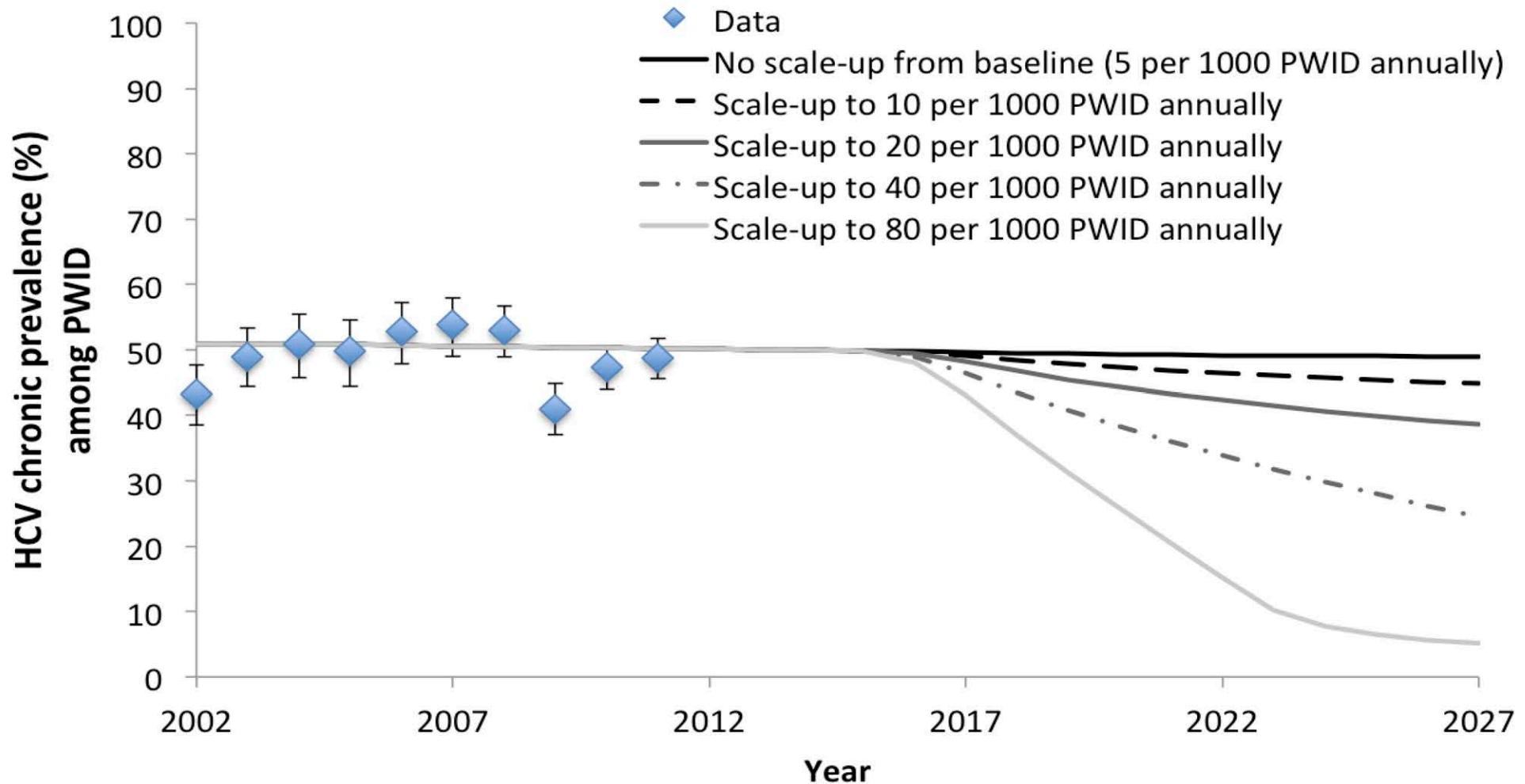
⁵ RKI, *Epid. Bull* 22/2015

⁶ Radun et al. *ESCAIDE conference* 2007

Characteristics of high-risk populations

	HCV ⁺ PWID	HIV ⁺ /HCV ⁺ MSM
Population size	Large (50-100k)	Small compared with PWID (5-10k)
HCV prevalence	Heterogeneous, but can be high (>60%)	Relatively low (~8%)
Linkage to testing and treatment	Poor/evolving	Good
Next-generation DAA SVR for chronic infection	High	High
International transmission network/travel	Probably minimal in most settings	High
Reinfection rate	Appears lower than primary incidence	Appears higher (5-10x) than primary incidence

The « treatment as prevention » strategy



Modelling, Melbourne (Australia)

The « treat your friends » strategy

The Impact of Injecting Networks on Hepatitis C Transmission and Treatment in People Who Inject Drugs

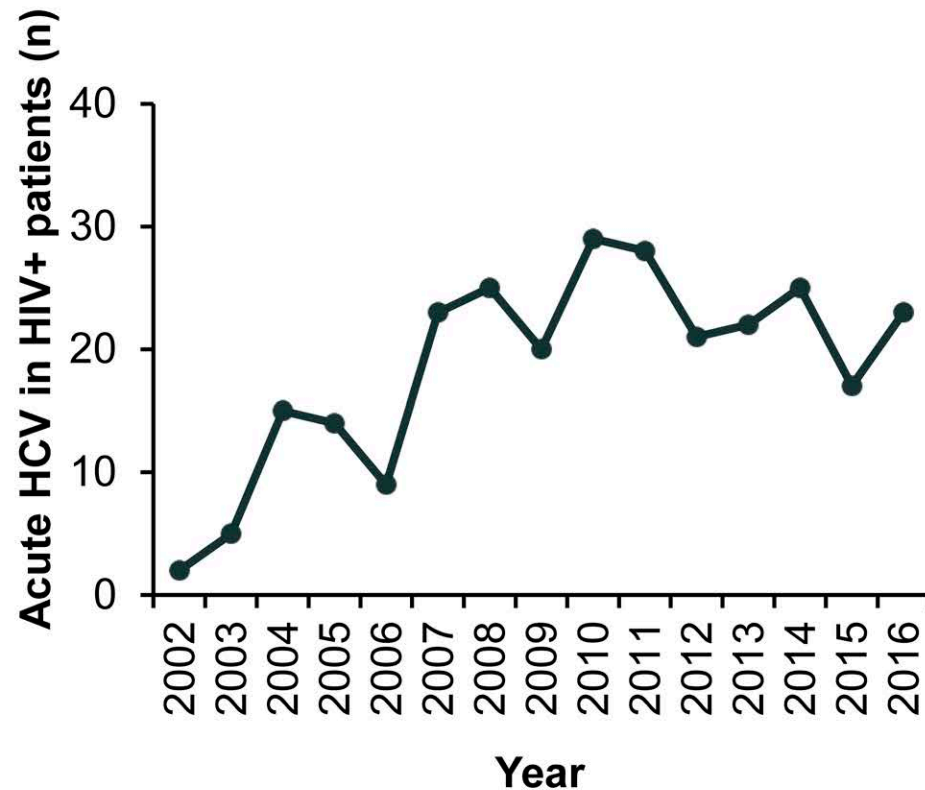
Margaret Hellard,^{1,2,3,4} David A Rolls,⁵ Rachel Sacks-Davis,^{3,4} Garry Robins,⁵ Philippa Pattison,⁵
Peter Higgs,^{1,4,6} Campbell Aitken,^{1,3,4} and Emma McBryde^{1,7}

(HEPATOLOGY 2014;60:1861-1870)

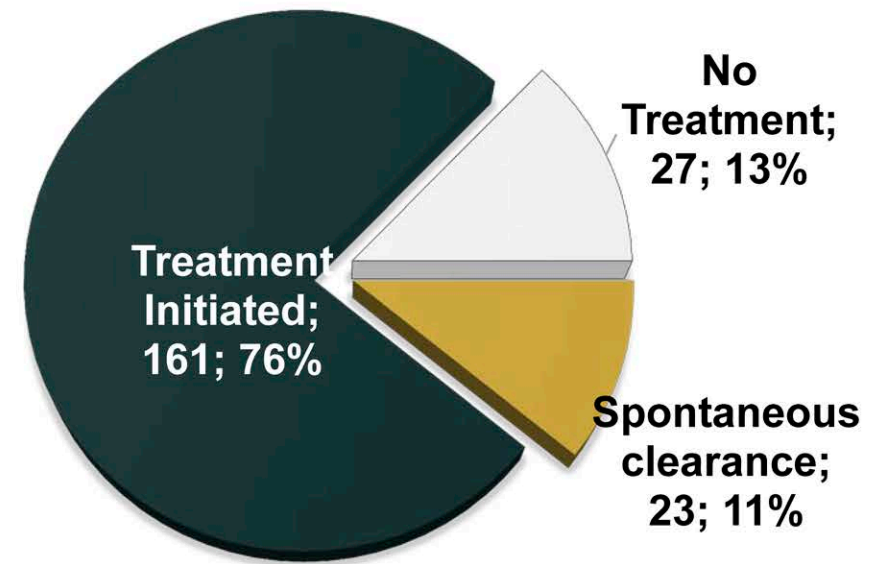
“taking the injecting network into account when treating PWID significantly impacts on HCV prevalence in the population over 5 and 10 years.”

Acute HCV in HIV+ MSM: high treatment uptake

Single center Berlin, 1500 HIV+, 211 cases of acute HCV in HIV+ MSM
2002–2013



ZIBP, Berlin

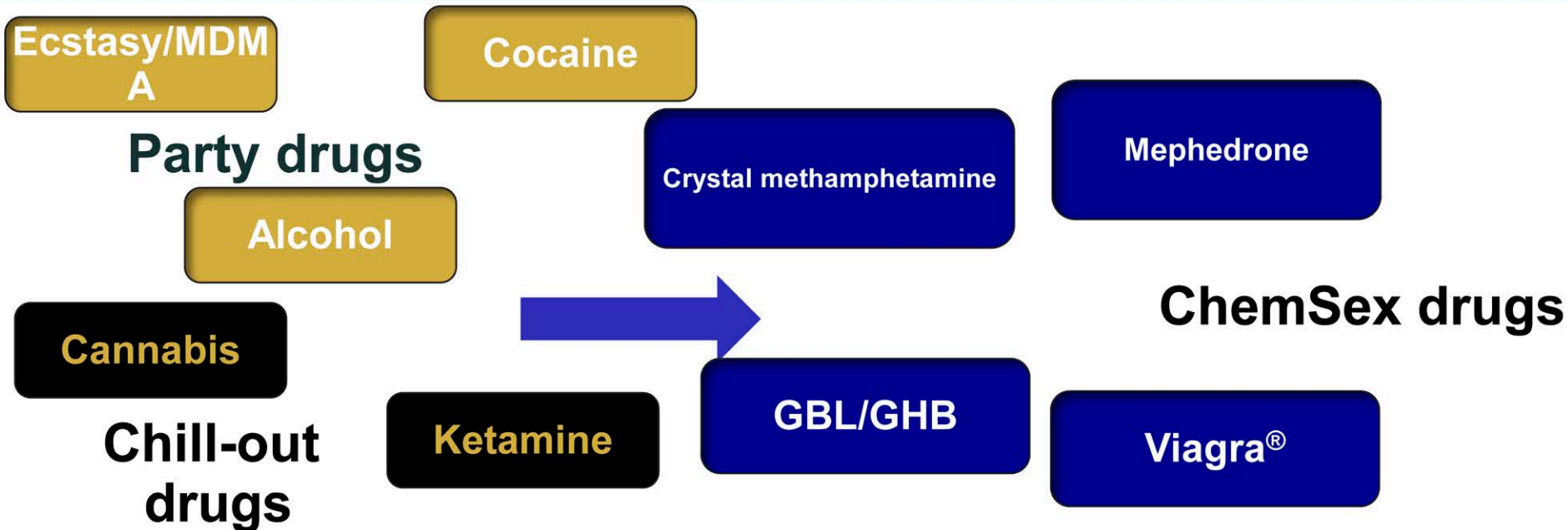


Social media and modern travel has changed way people meet and socialise

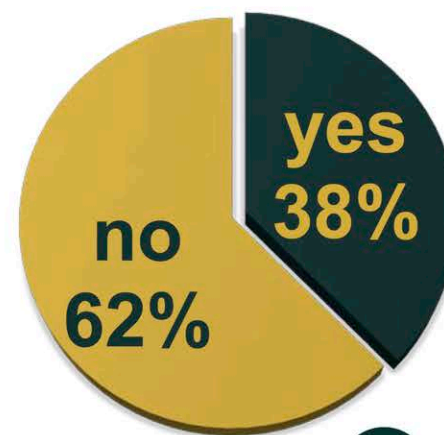
Apps and online 'hook-up' sites used to seek sex



Shift in drug use/"Chemsex"

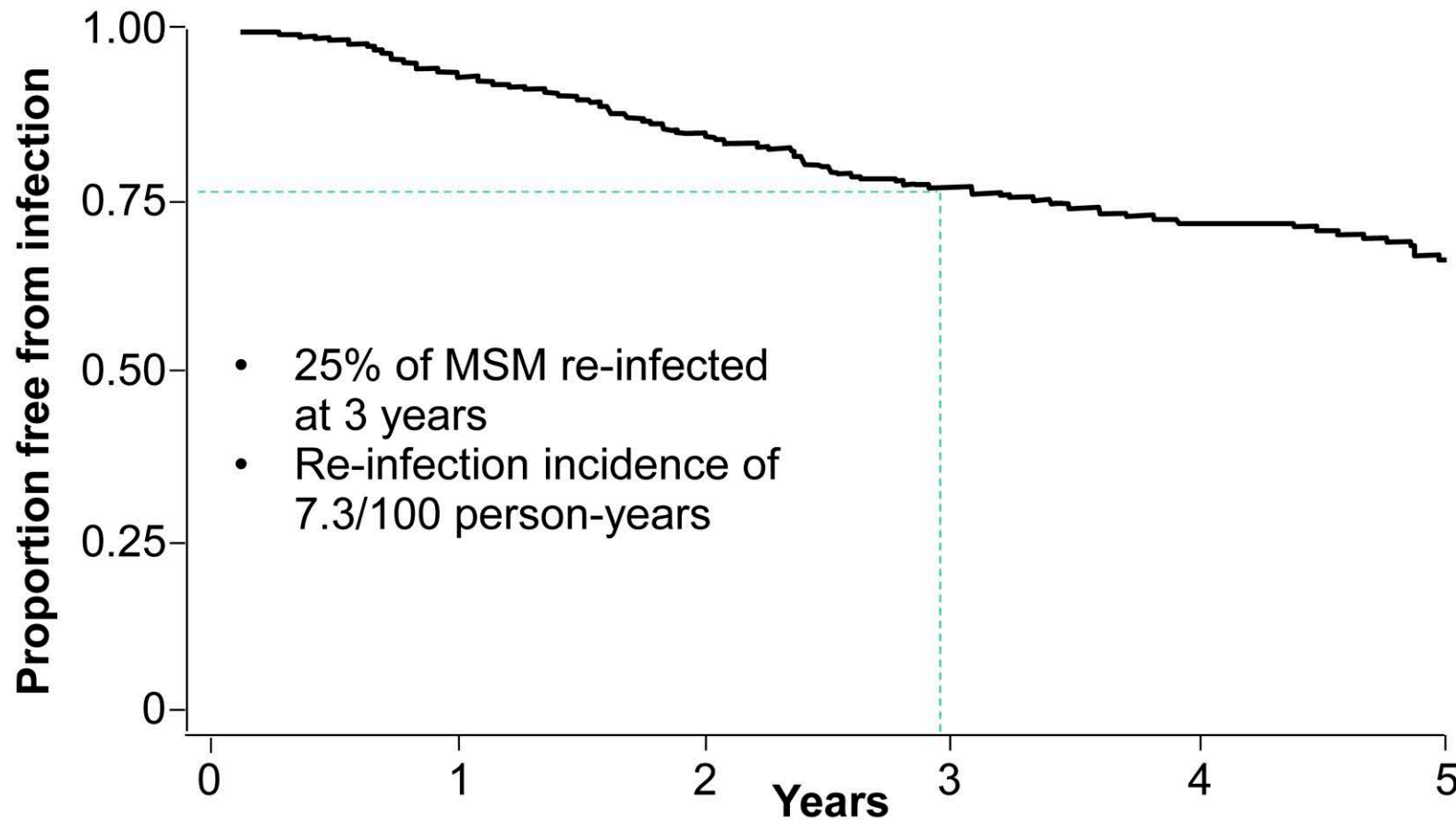


Have you ever used needs to inject drugs in a party setting?

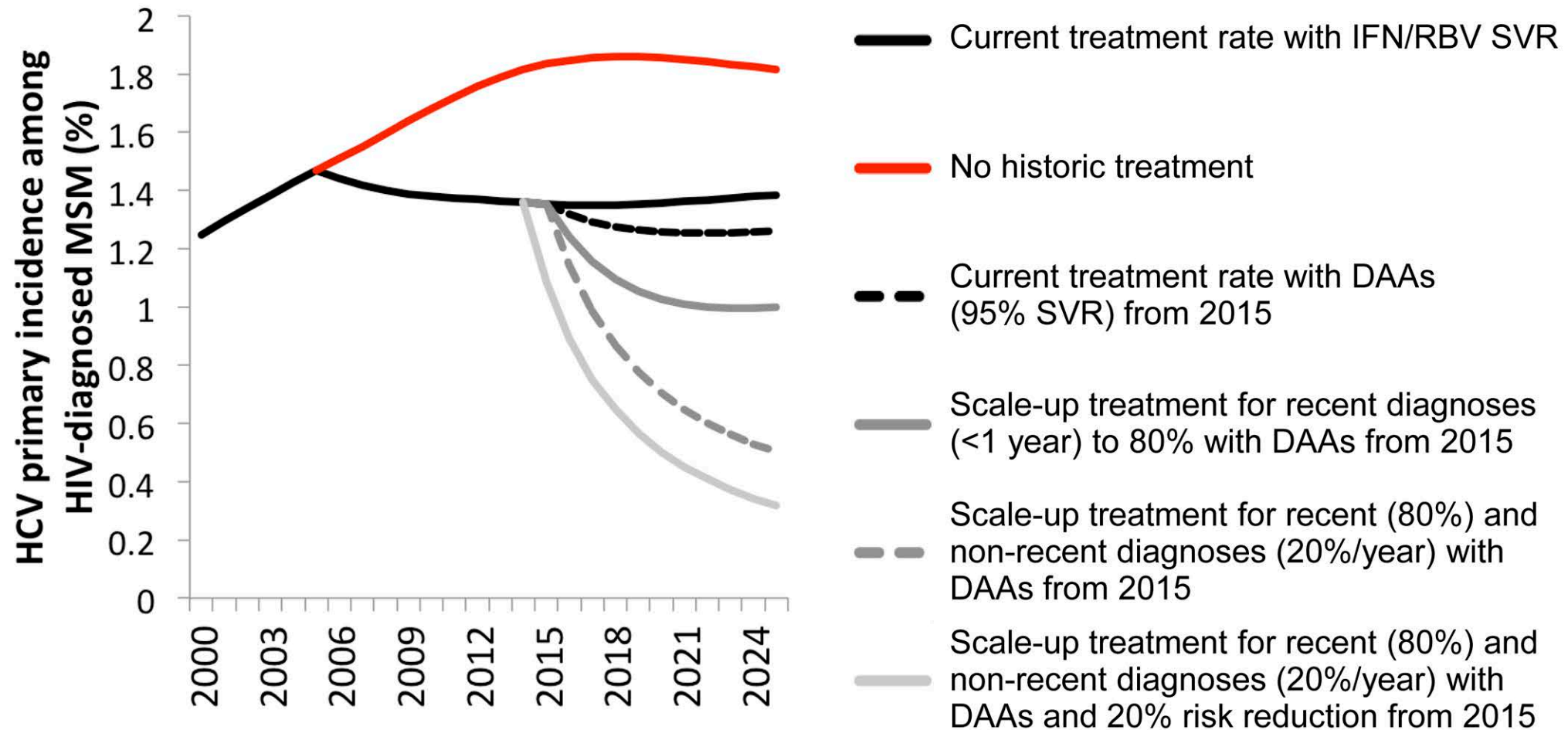


There is a substantial risk of HCV re-infection in HIV+ MSM in Western Europe

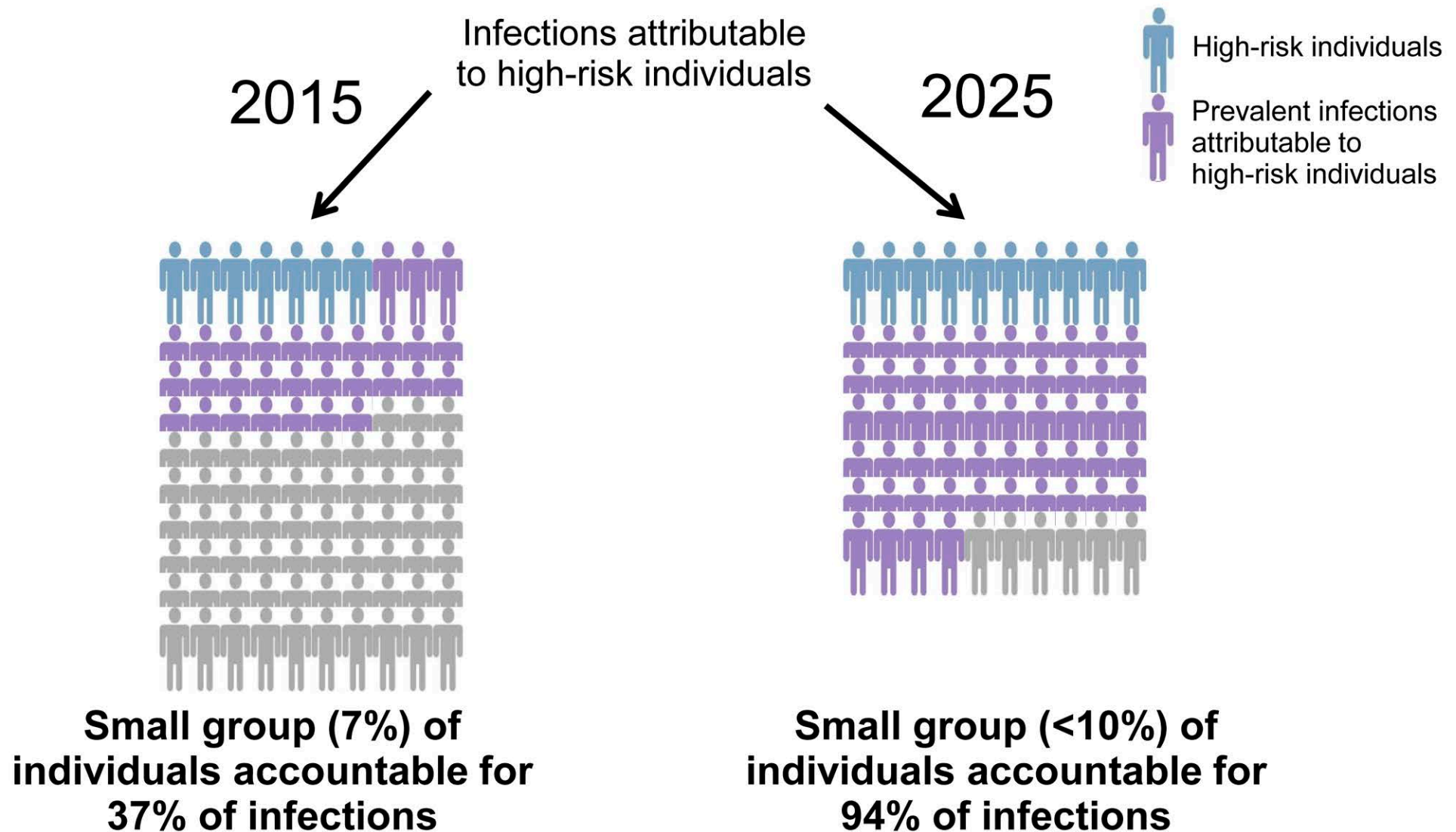
Data from the European AIDS Treatment Network (NEAT) consortium centres in Western Europe (UK, Germany, Austria and France)



DAAs for acute/early HCV in HIV-infected patients: TasP



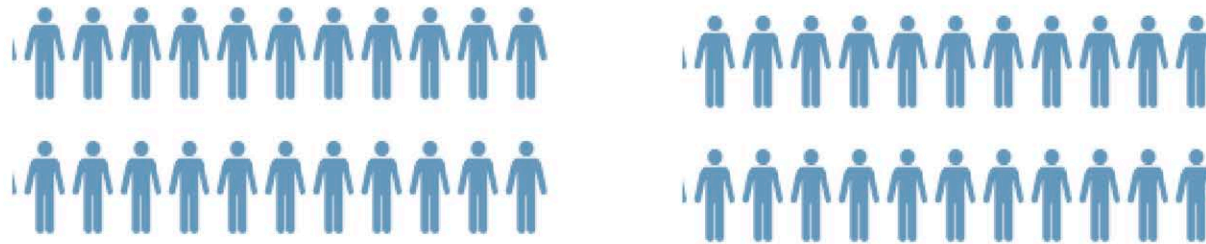
A small group of high-risk individuals may contribute disproportionately to an HCV epidemic in HIV+ MSM



Cases of acute HCV are now starting to emerge in HIV– MSM

Retrospective review of HCV testing in HIV– MSM
London sexual health clinic Jan 2010 to May 2014

44 cases of HCV identified



Mean age 37 years

How to target high-risk populations?

- **We need a clear definition of the specific risk pattern**
- **In classic PWID, harm reduction programs plus treatment uptake will probably decrease prevalence**
- **Definition and treatment of the transmitter core group probably key to reduce prevalence/incidence/reinfection in HCV-MSM**