

TACKLING HCV TRANSMISSION USING A COMBINATION PREVENTION APPROACH

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HEPATITIS C VIRUS PREVENTION

- People who inject drugs (PWID) are the main risk group in the US
- No vaccine
- **Opiate substitution therapy (OST) and needle and syringe programs (NSP)** effective at reducing HCV transmission risk (~50%, combined ~80%)
- **HCV antiviral treatment** highly effective for PWID... possibility of HCV treatment for prevention?

HIV TREATMENT AS PREVENTION...WHAT ABOUT HCV?



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ORIGINAL ARTICLE

Prevention of HIV-1 Infection with Early Antiretroviral Therapy

Myron S. Cohen, M.D., Ying Q. Chen, Ph.D., Marybeth McCauley, M.P.H., Theresa Gamble, Ph.D., Mina C. Hosseinipour, M.D.,



TREATMENT IS PREVENTION

A scientific breakthrough in 2011 showed that HIV treatment not only saves lives, but reduces the risk by

96%

of transmitting the disease.

GUIDELINES

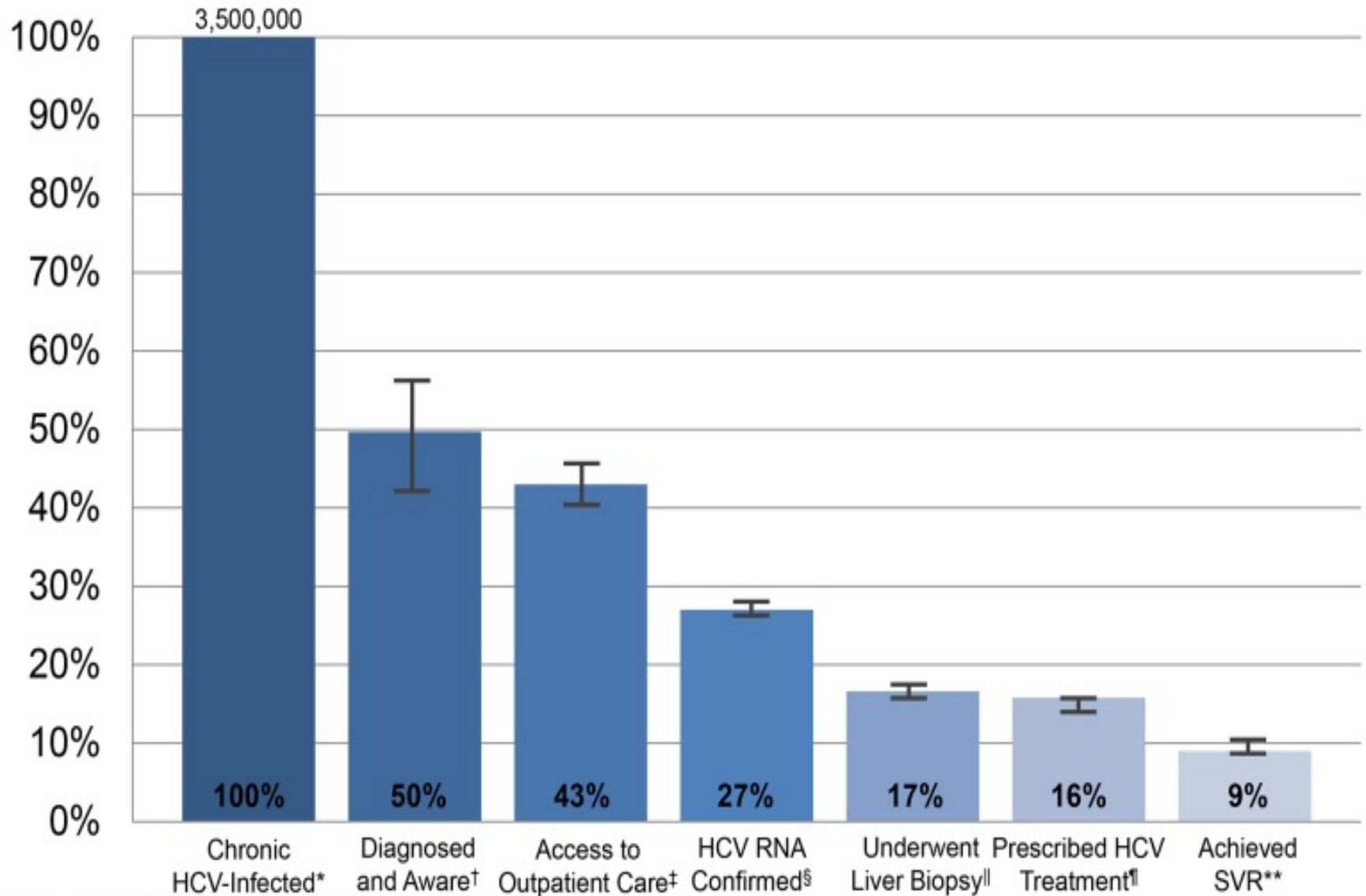


CONSOLIDATED GUIDELINES ON THE USE OF ANTIRETROVIRAL DRUGS FOR TREATING AND PREVENTING HIV INFECTION

RECOMMENDATIONS FOR A PUBLIC HEALTH APPROACH

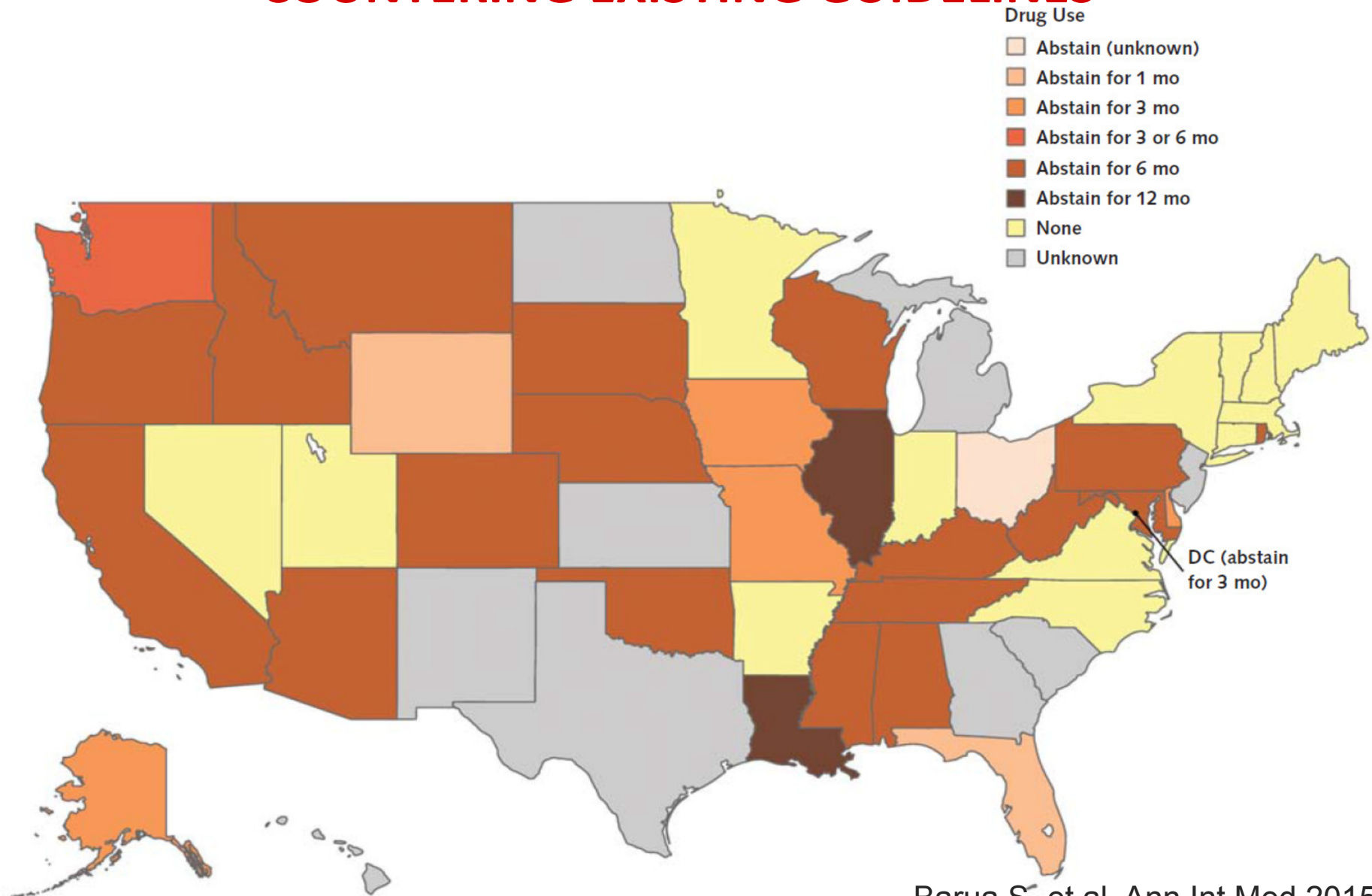
JUNE 2013

HCV CASCADE OF CARE IN THE US: NEED IMPROVED DIAGNOSIS AND TREATMENT

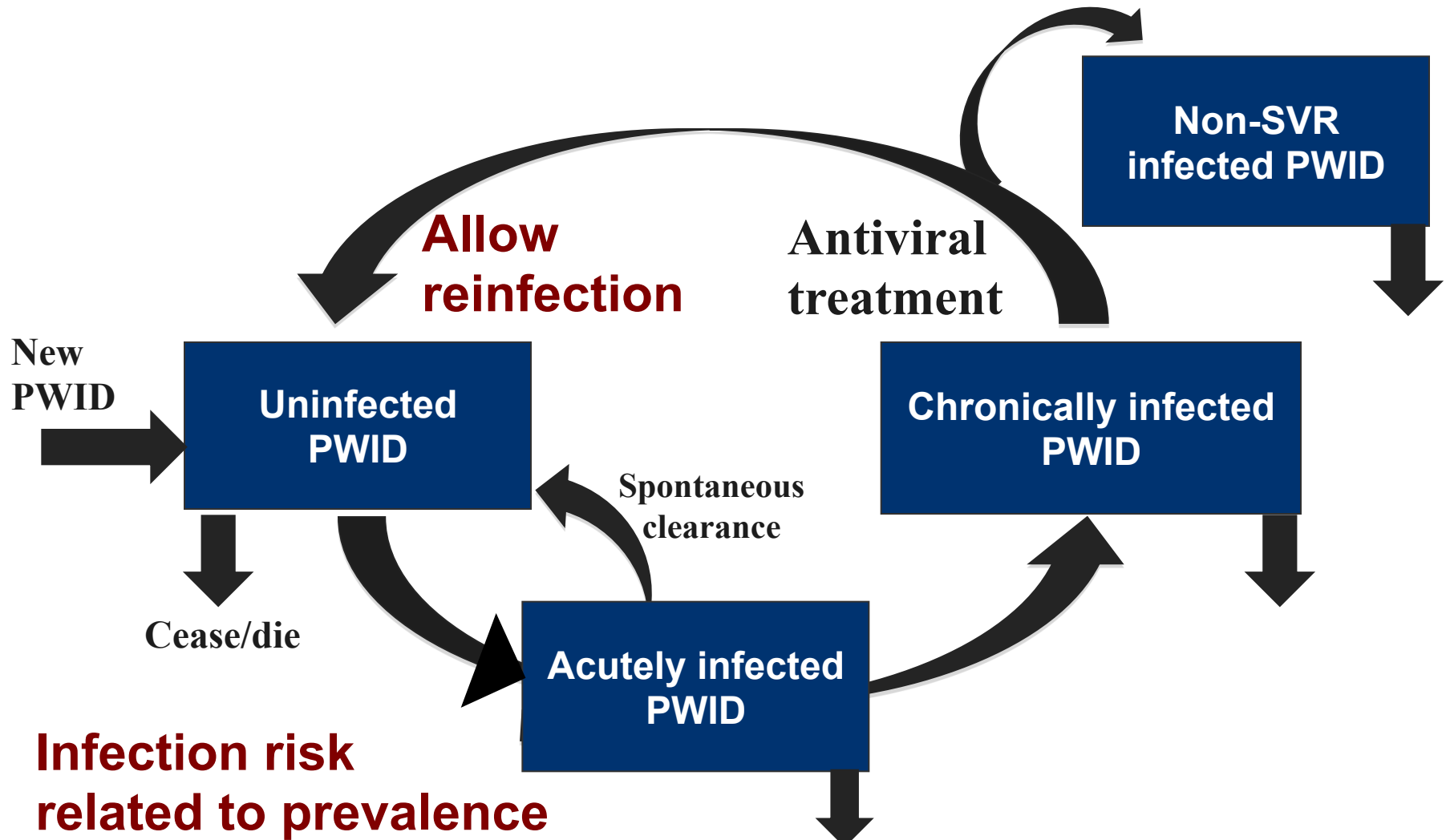


* Chronic HCV-Infected; N=3,500,000.

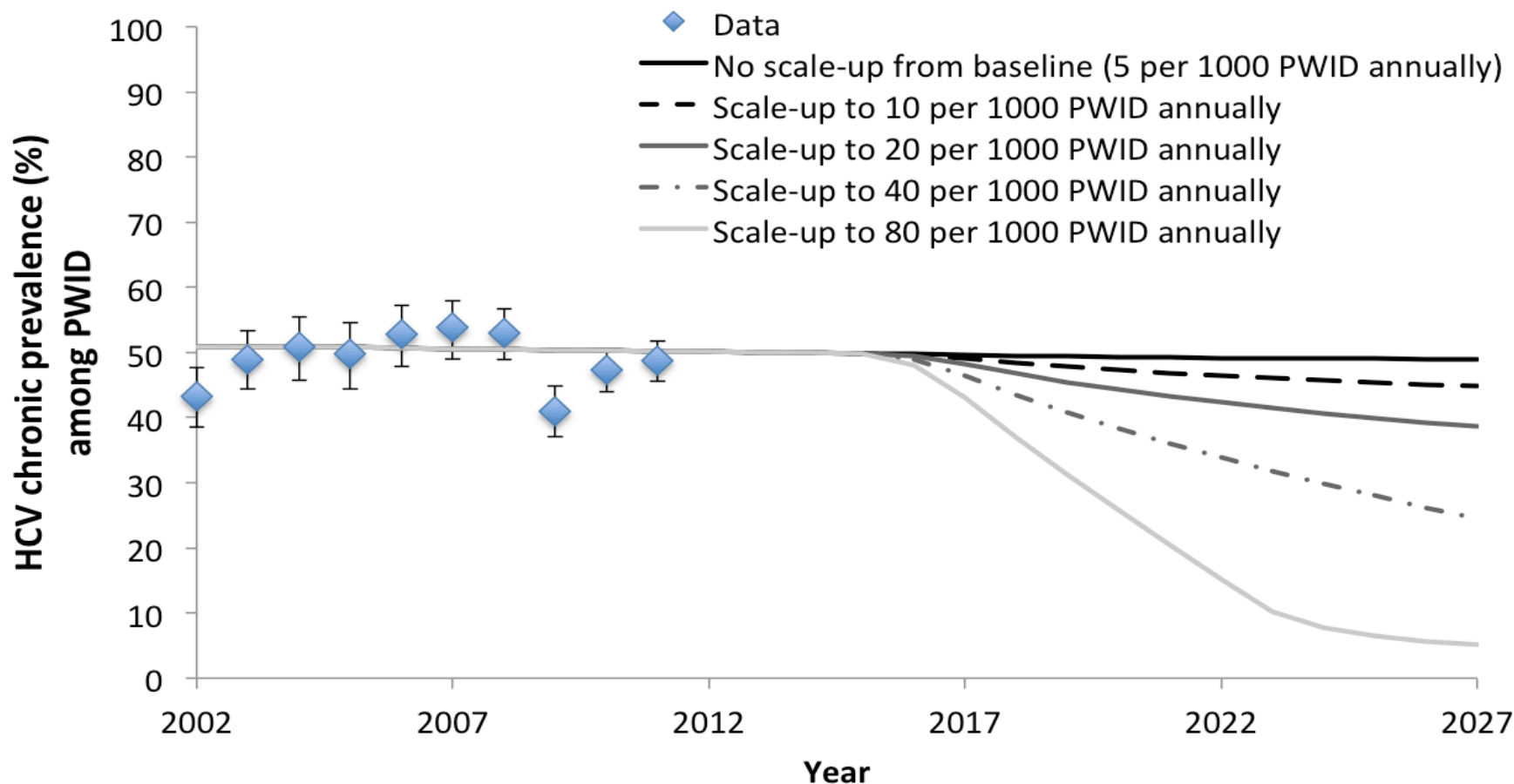
SOFOSBUVIR MEDICAID REIMBURSEMENT CRITERIA: REQUIRED ABSTINENCE FROM DRUG/ALCOHOL- COUNTERING EXISTING GUIDELINES



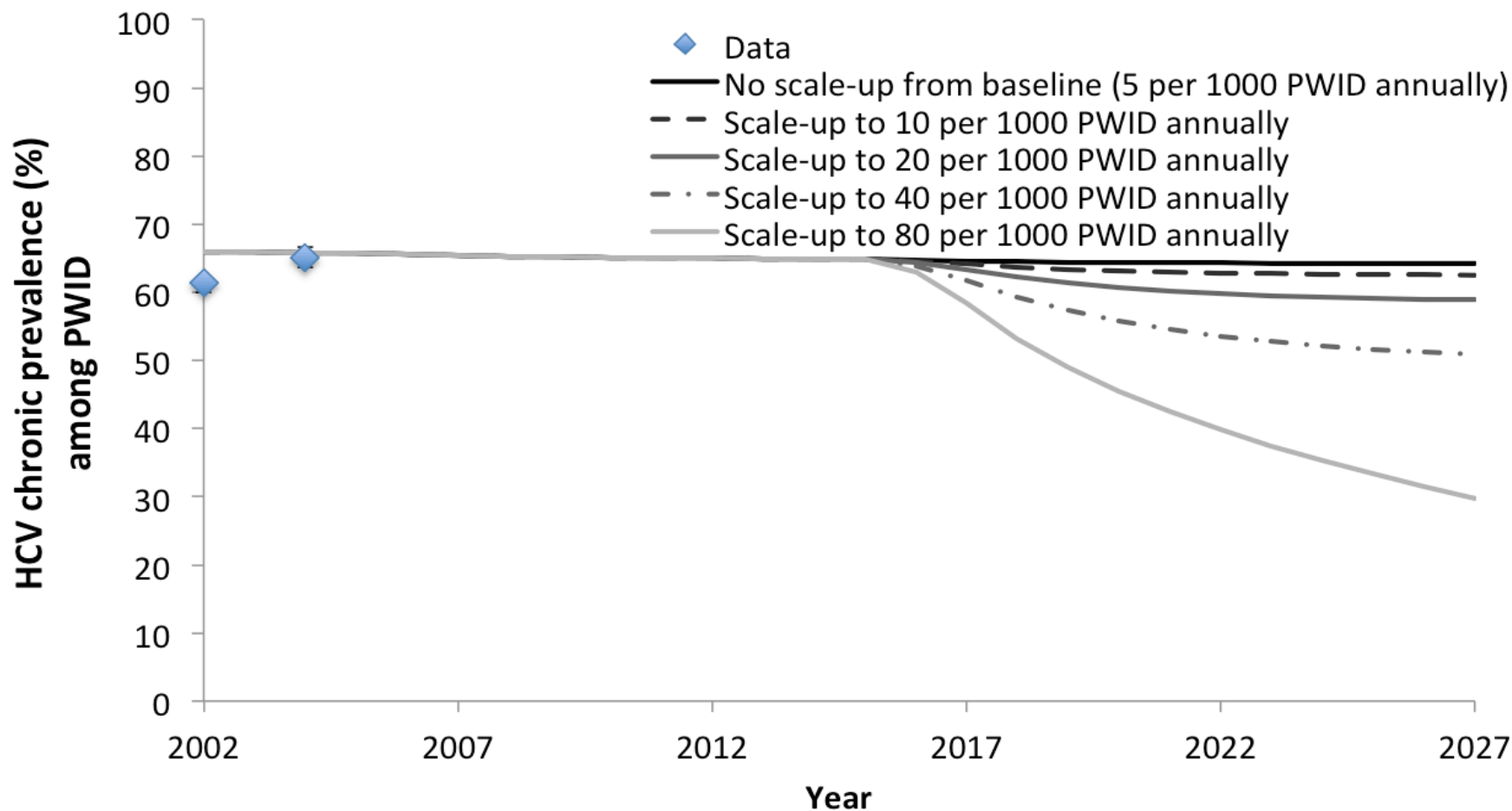
EVALUATING HCV TREATMENT AS PREVENTION: A DYNAMIC HCV TRANSMISSION MODEL IS NECESSARY



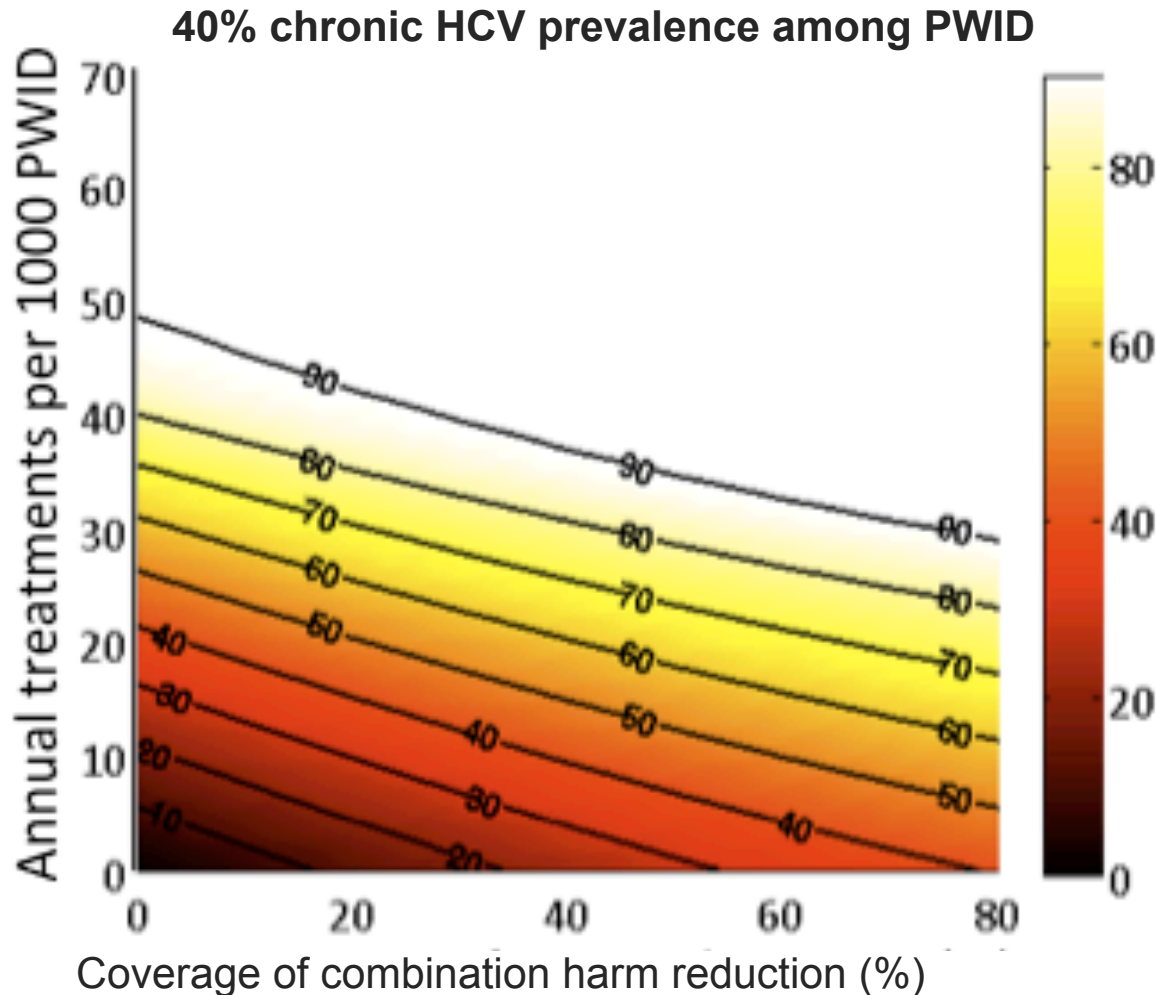
HCV TREATMENT AS PREVENTION AMONG PWID: MODELING MELBOURNE, AUSTRALIA



HCV TREATMENT AS PREVENTION AMONG PWID: MODELING VANCOUVER, CANADA

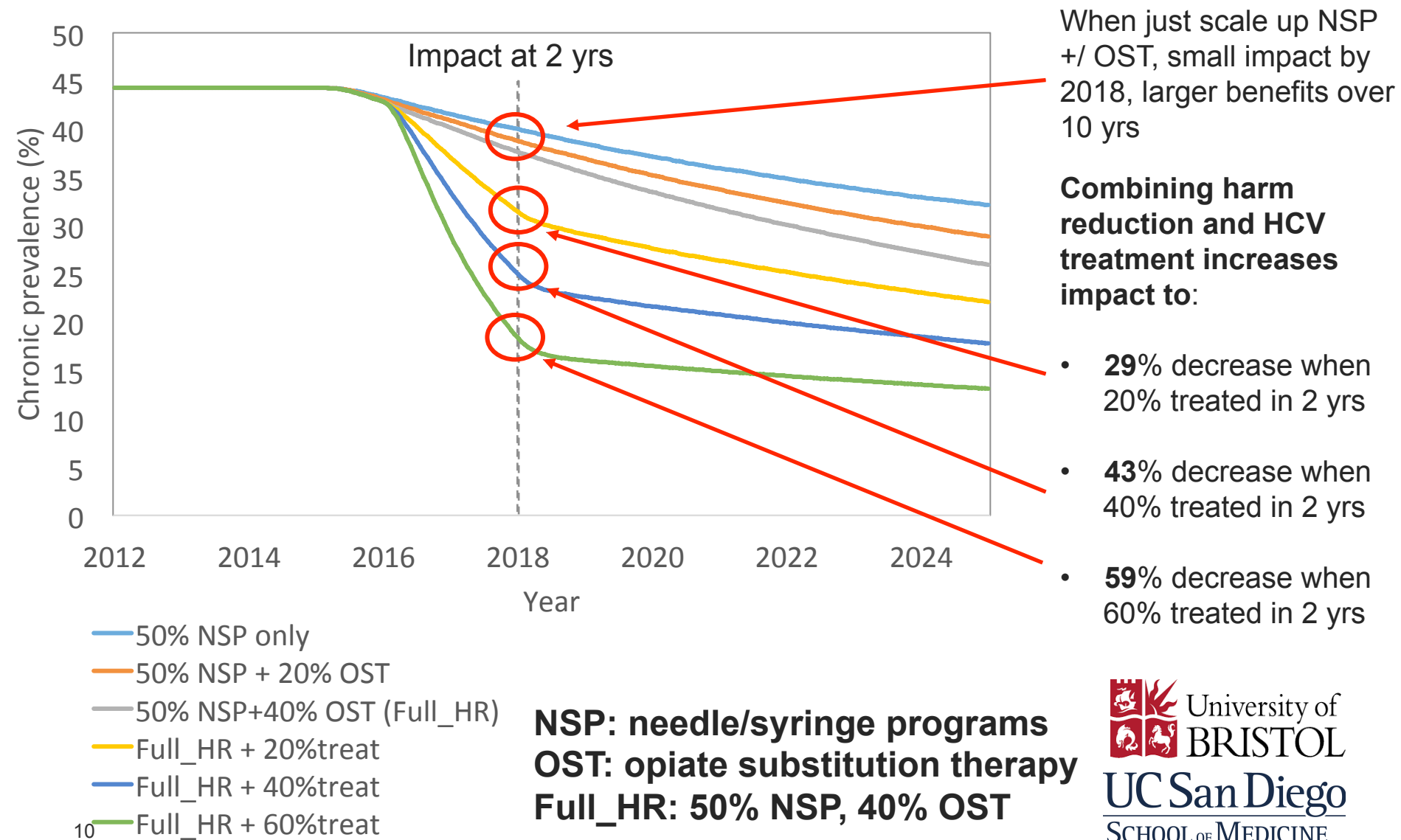


COMBINATION PREVENTION (HARM REDUCTION+TREATMENT) COULD ELIMINATE HCV AMONG PEOPLE WHO INJECT DRUGS

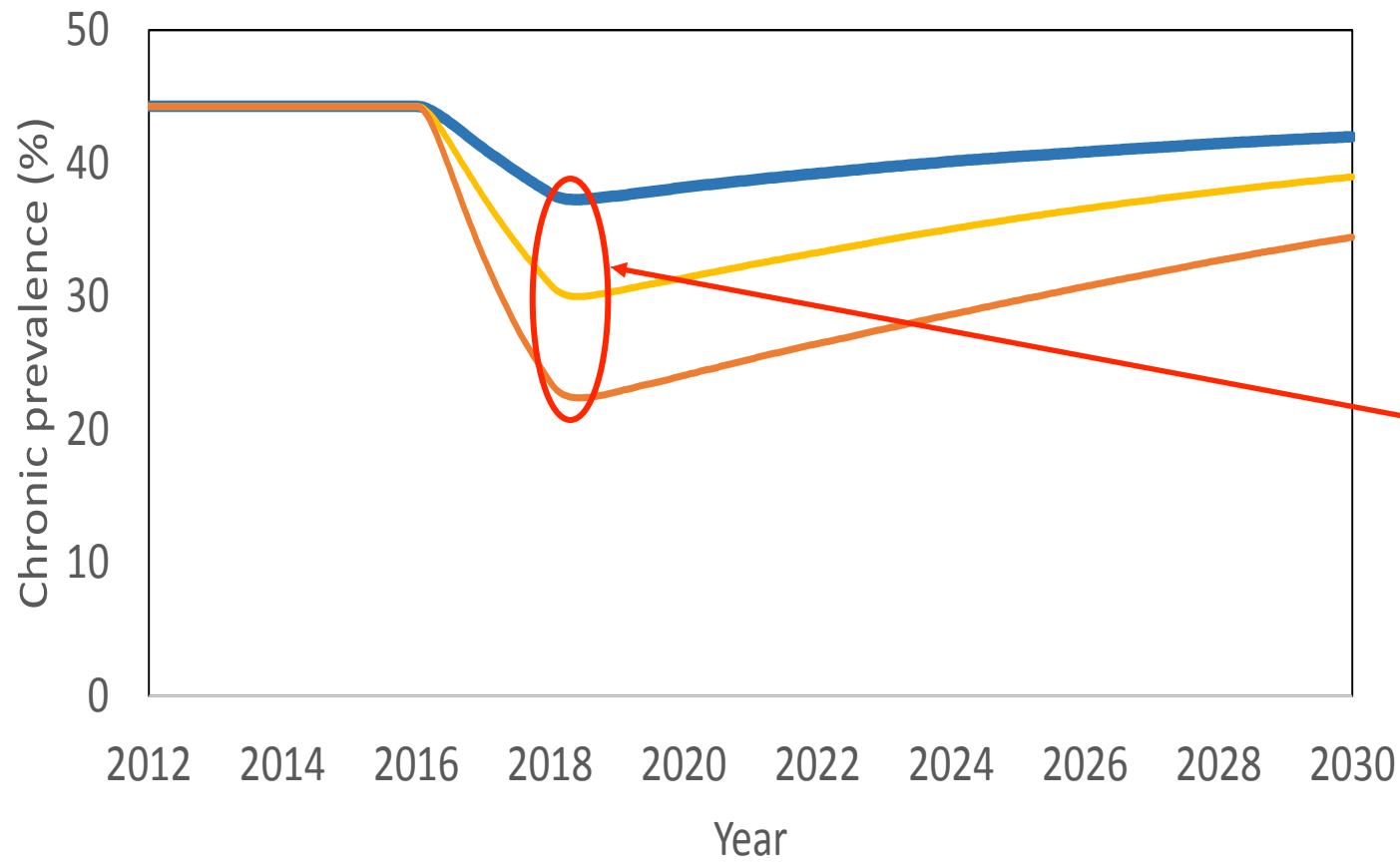


White area:
>80% reduction
in prevalence
within 10 years

MODELING COMBINATION PREVENTION IN AUSTIN, INDIANA



HARM REDUCTION ESSENTIAL FOR SUSTAINED AND LARGE IMPACT



If **only** treatment
(for 2 years) and
No NSP and OST

**Benefits are not
maintained with
prevalence
rebounding when
treatment stops.**

— 20% treatment only — 40% treatment only — 60% treatment only

DISCUSSION

- Modest levels of HCV treatment for people who inject drugs could have substantial prevention benefit
- **Scale-up of comprehensive combination prevention (testing/treatment AND harm reduction) essential for large and sustained impact**
- Need empirical studies testing HCV treatment as prevention

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