

Working with active users: Successful linkage to care

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Today's objectives

1. Describe epidemiology of people who inject drugs (PWID) in the United States
2. Describe characteristics of PWID that increases risk of infectious disease transmission and acquisition
3. Describe population characteristics of PWID that make this group hard-to-reach
4. Describe a model of care for reaching this hard-to-reach population and linking to and engaging in primary care

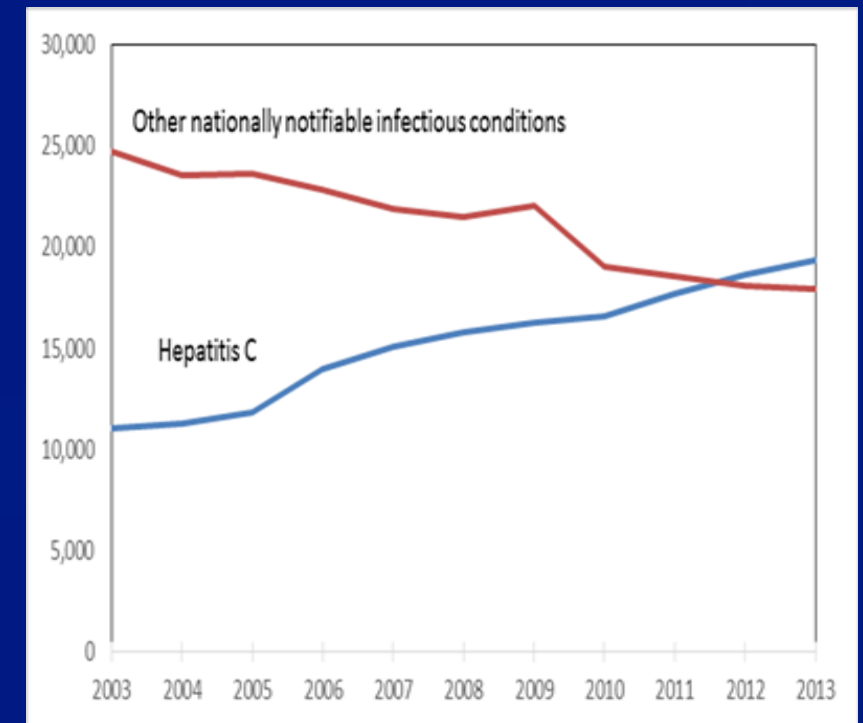
Background

- PWID are at high risk of transmission of blood borne viruses, and other co-morbidities
- PWID are commonly not engaged in primary care services due to marginalization, lack of resources, and competing demands
- PWID are often 'hard-to-reach' and may be difficult to engage in care; novel methods to engage this population are critical to success

Epidemiology of HCV among Persons Who Inject Drugs - United States

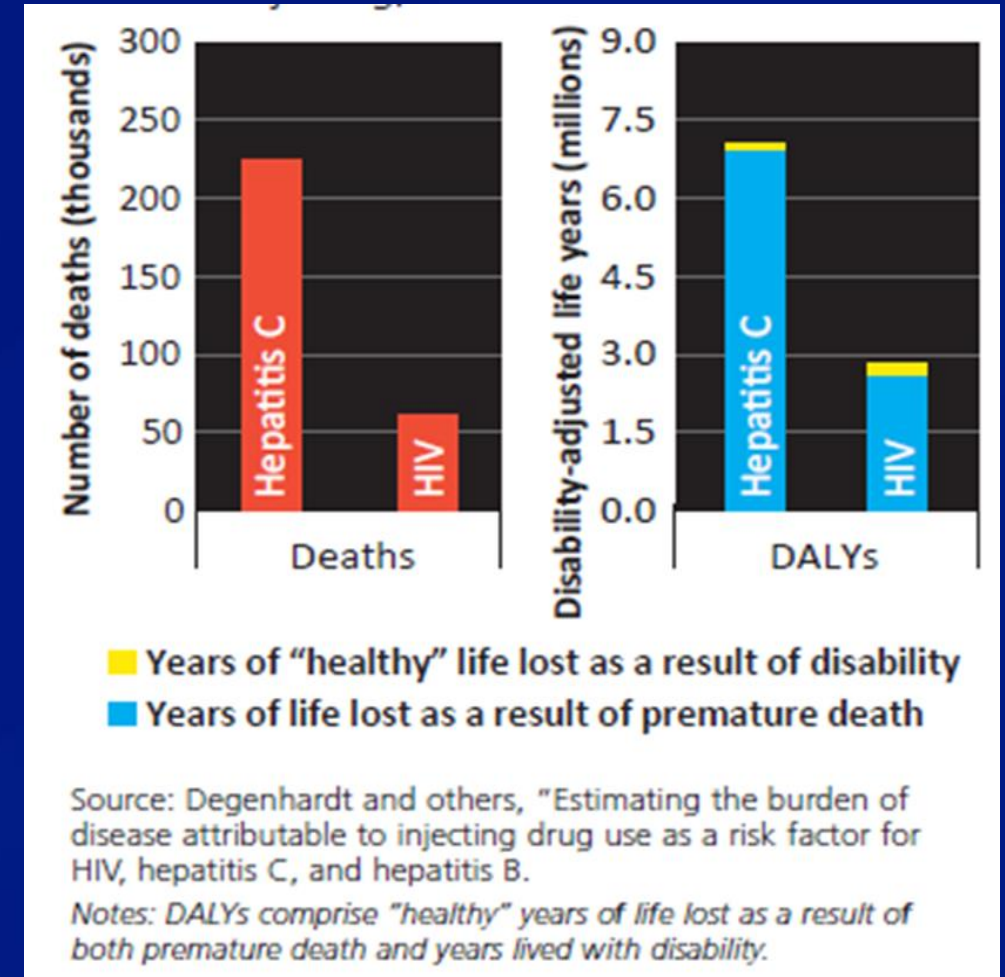
- **Persons with HCV - 3.5 M (2010)**
 - 1.3M (37%) with history of injection drug use
 - 1.75 (49%) – no reported risks for HCV infection
- **New HCV infections – 33,900 (2015)**
 - 39% provide risk information; 80% cite injection drug use
- **HCV incidence among active/recent PWID: 23/100PY**
- **Number of life time PWID – 6.6 million**
- **Number of persons injecting in past year- 775,000**
 - Recent PWID with HCV- 334,000 (43%)

Rising HCV mortality - 19,629 Deaths (2015)



Consequences of HCV infection

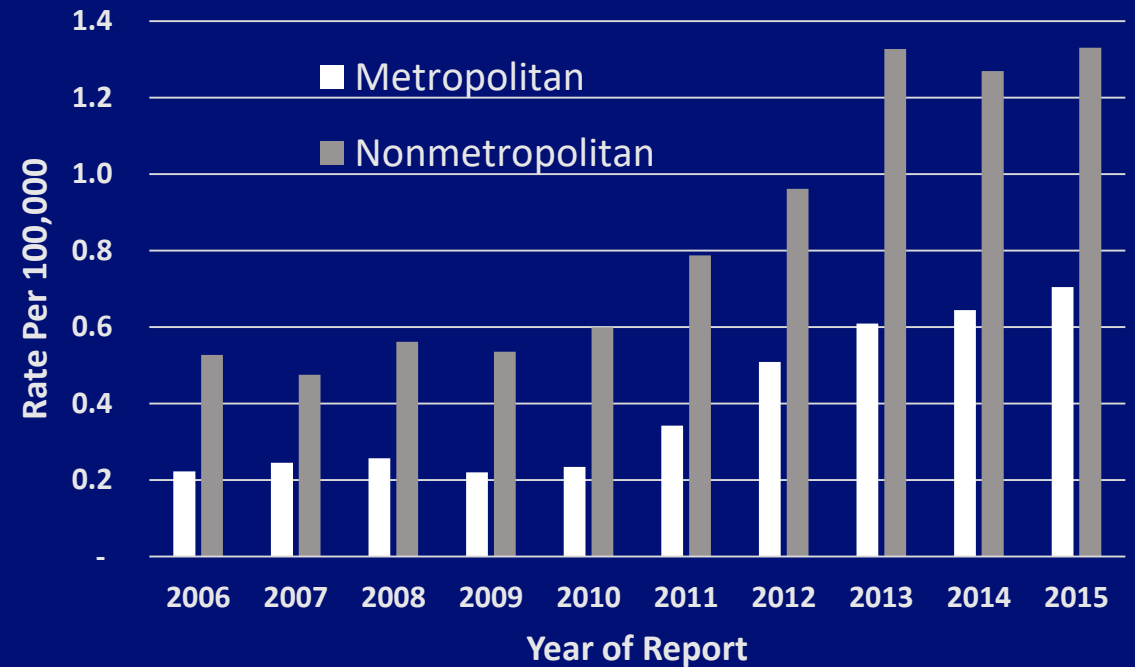
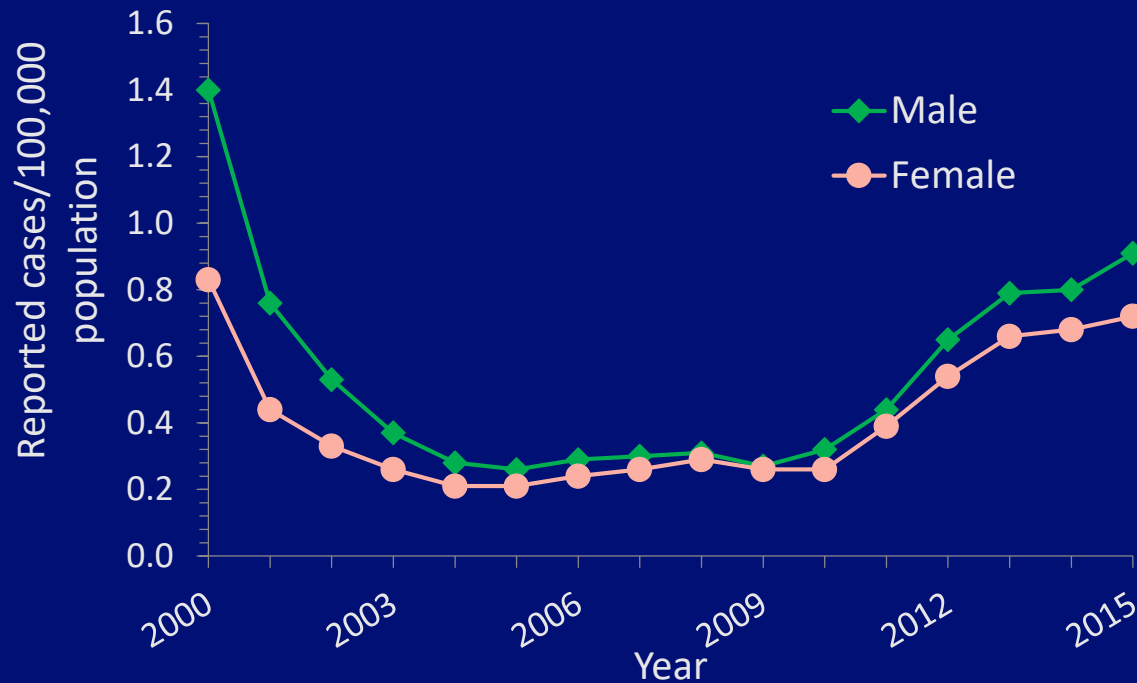
- Fatigue
- Appetite loss
- Nausea
- Vomiting
- Abdominal pain
- Of every 100 persons infected with HCV, approximately
 - 75–85 will go on to develop chronic infection
 - 60–70 will go on to develop chronic liver disease
 - 5–20 will go on to develop cirrhosis over a period of 20–30 years
 - 1–5 will die from the consequences of chronic infection (liver cancer or cirrhosis)



Injection drug use and viral hepatitis

- Highly efficient. Can be spread through drug paraphernalia, not just needles and syringes
- Long survival period on inanimate objects
- One drop of blood with HBV, HCV and HIV
 - 30% chance of getting HBV
 - 1.8% chance of getting HCV
 - .03% chance of getting HIV

Increases in HCV Incidence - United States



- ~31,000 new HCV infections in 2015
- 1:1 male: female ratio, predominantly white
- Highest incidence- 20-29 years, non-urban areas

PWID risk factors – infectious disease

- Age: Younger age is an important risk factor for viral hepatitis among PWID, and young PWID report frequent needle borrowing and abundant sexual risk behavior including unprotected sex, multiple sexual partners and transactional sex.
- Trauma: Report experiencing a large number of negative and traumatic events, including violence, intergenerational drug abuse, forced institutionalization, and sexual abuse.
- Victimization: Many are physically or sexually victimized, contributing further to common psychiatric disorders such as depression and post-traumatic stress disorder (PTSD).

PWID and Risk

- Lack of opportunity: Limited education and high levels of unemployment and incarceration exacerbate these already complicated circumstances
- Disenfranchisement: Fear and mistrust of public authorities estranges them further, resulting in very high risk of blood-borne viral infections and other drug-related harms.

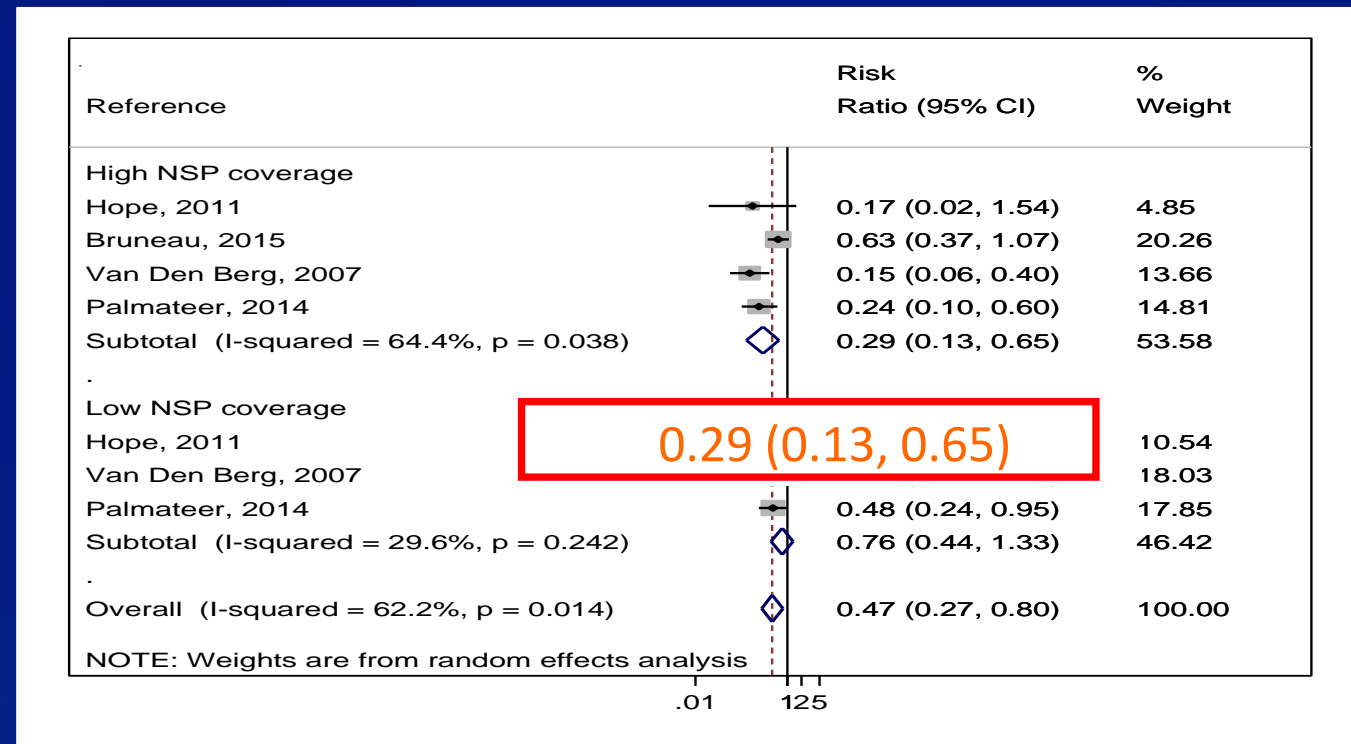
Young PWID

- Highly mobile
 - 63% of PWID < 30 years report travel in past three months
 - 11% of PWID >30 report travel in past six months
- Frequent travelers may engage in high risk behaviors
 - Frequent needle sharing
 - Higher number of sex partners
 - Polysubstance use
 - High rates of alcohol use and drinking to blackout
 - Use of public injecting spaces (AKA 'shooting galleries')

Syringe Service Provision (SSP) and Medication-assisted Treatment (MAT) Reduce HCV Transmission Risks

New Cochrane systematic review

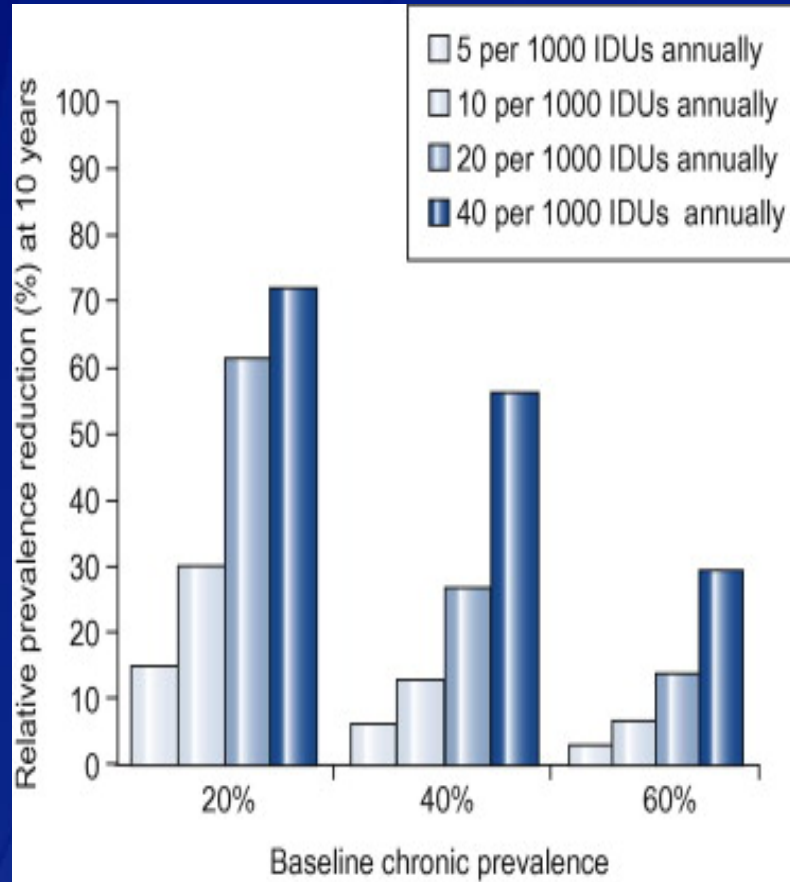
- MAT decreases risk by 50%
- SSP decreases risk by 56% (in Europe); limited to no benefit in US studies
- MAT+SSP jointly decrease risk by 71%



Role of Syringe Services Program

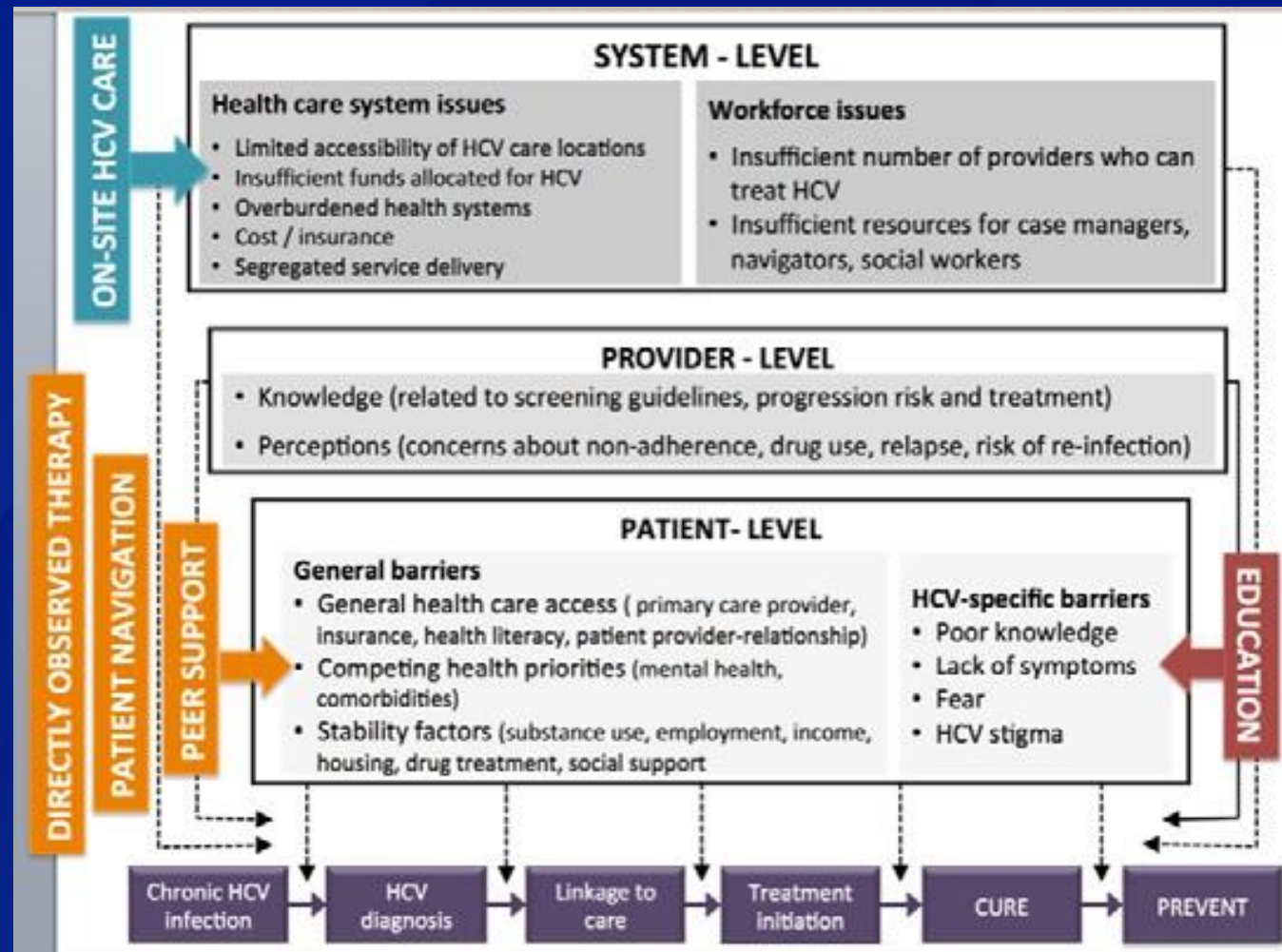
- Opportunity to engage in care
- Access to primary care
 - More likely to connect with primary care when meet a health care provider on the street
- Testing/screening services
- Patient navigation and case management
- Naloxone distribution
- HAV/HBV vaccine

HCV cure as prevention

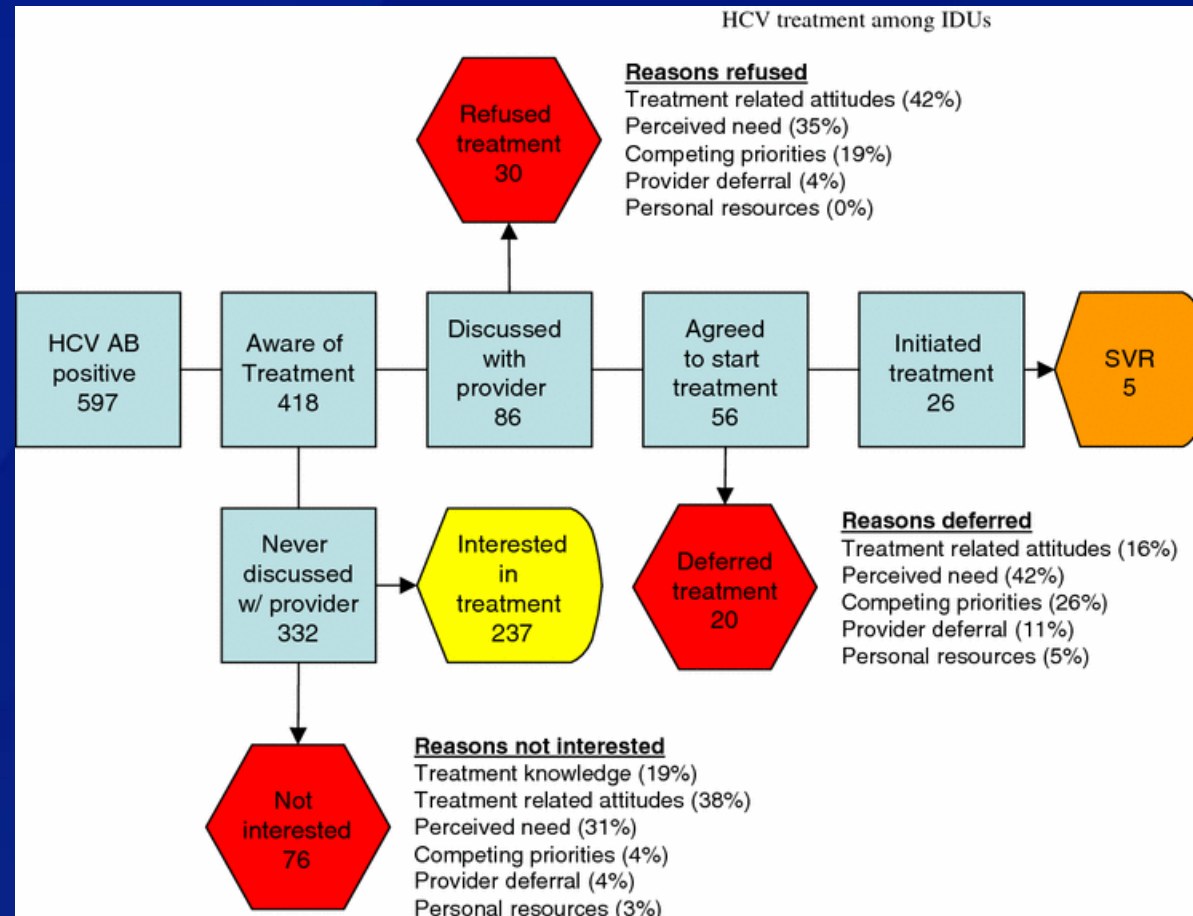


- Antiviral Therapy Can Reduce HCV Prevalence Among Injecting Drug Users
- Annually treating 10 HCV infections per 1000 IDU and achieve SVR of 62.5%
- Projected to result in a relative decrease in HCV prevalence over 10 years of 31%, 13%, or 7% for prevalences of 20%, 40%, or 60%, respectively
- HCV Cure as Prevention

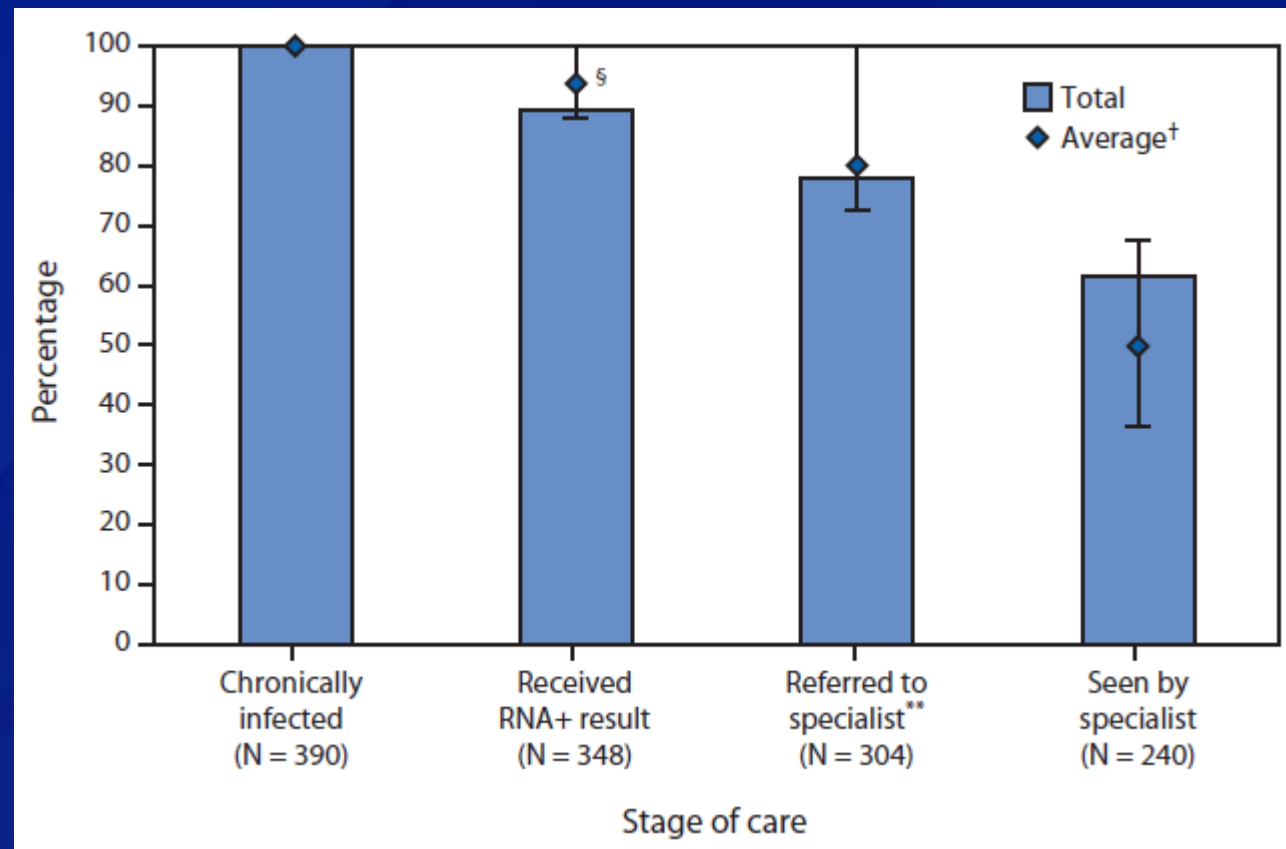
Barriers to linkage to care - HCV



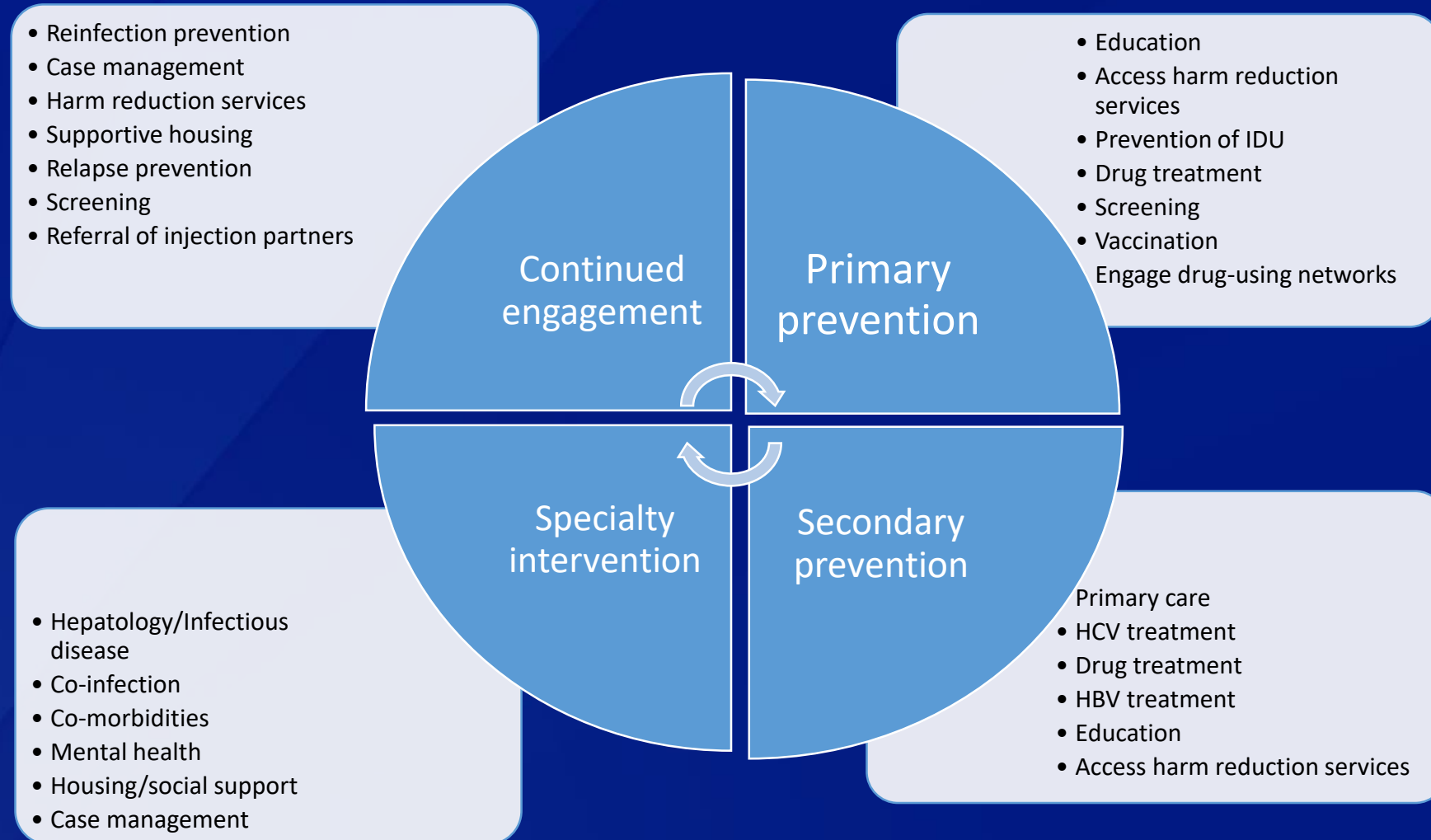
SOC HCV Care Cascade for PWID, Baltimore



Continuum of care with chronic HCV infection treated at 5 FQHCs with patient navigation — Philadelphia, PA, October 2012–July 2014



Viral hepatitis prevention cascade



Predictors of successful engagement in care among PWID

- Engagement with social services/ability to rely on outreach workers
- Longer injecting career
- History of HIV and HCV testing
- Utilization of syringe service programs
- Financial incentives

Planning For Success

- Locate services and clinics in areas with high numbers of PWID
 - Syringe service programs
 - Drop-in centers
 - Homeless clinics
 - Drug treatment facilities
- Develop an in-depth outreach plan, strategically targeting neighborhoods frequented by PWID
- Develop an aggressive retention plan
- Outreach workers conduct street based recruitment and retention activities
- Phone number to call for information and referrals
- Consider incentives

Planning For Success

- Develop MOU agreements with local jails to ensure continuity of care
- Develop an in-depth outreach plan to guide strategic outreach
- Use social networking and retention plan
- Use visual reminders, EMR/case note reminders and vaccine registries
- Develop high quality, 'warm' referrals
- Provider education
- Outreach and partnerships with stakeholder organizations

Outreach

- The street - Outreach workers identify the best street venues for recruitment and appropriate times for street outreach as well as establish a street presence where PWID congregate.
- Education – Staff work with other agencies serving PWID, i.e. other SEPs, community clinics, emergency departments
- Flyering – Outreach workers post flyers at SROs, clinics, key street locations, SEPs, alleys, parks, public bathrooms, shelters, bars, and any other places a PWID is likely to be.
- Provider education – Remind health care providers of this high risk population and the need to ensure immunity

Retention and follow up

- **Contact forms** – Collect detailed contact information collected including: address, email, phone number, social media, and family contacts.
- **Location** - Clients are queried about where they spend time and various social services accessed.
- **Facebook** – With permission, the program ‘friends’ the client
- **Photo** – With permission, a face shot is taken.
- **Registry** – Utilize a EMR/case note system and vaccine registry to track follow up
- **Reminders** – Client receive appointment reminders by street contact, cell phone, email, home visits, text messages or social media.
- **No show** – If a client misses an appointment, all contact information given is used to make every effort to get that person in. Call local **jails, hospitals** to ensure series completion

Hepatitis B Vaccine

- HBV vaccine administered intramuscularly produces a protective antibody response in approximately **30%-55%** of healthy adults aged <40 years after the first dose
 - 75% after the second dose, and >90% after the third dose.
- Even if compliance with vaccination series not perfect, one dose better than none, 2 better than 1
- Concerns about series completion is not a reason not to initiate first dose
- **INITIATE VACCINE AT EARLIEST CONTACT**

Accelerated vaccination schedule

- WHO guidelines suggest utilizing Twinrix® accelerated schedule to improve series completion for PWID

	Standard schedule	Accelerated schedule
Dose	Day	Day
#1	0	0
#2	30	7
#3	6 months	21-28

- On accelerated schedule, provide booster dose at 1 year

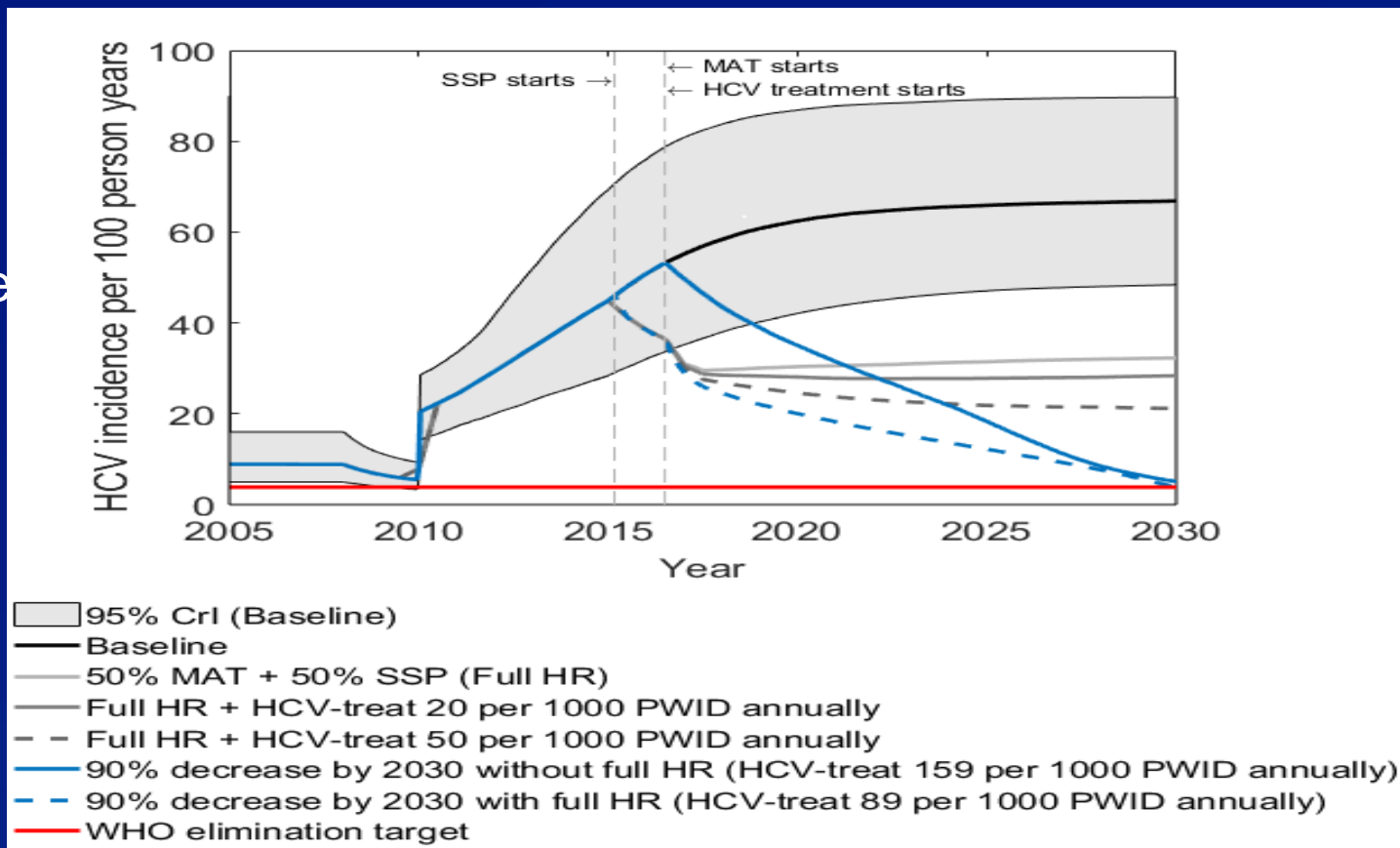
Changes in HCV Incidence by Harm Reduction and HCV Cure as Prevention Strategy (90% reduction, Elimination target)

Medication assisted therapy - 50%

Syringe service programs - 56% decline

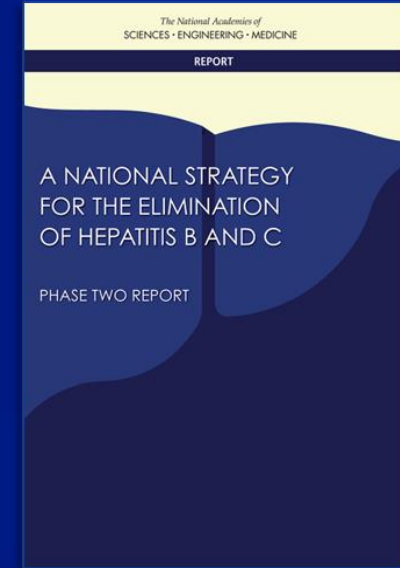
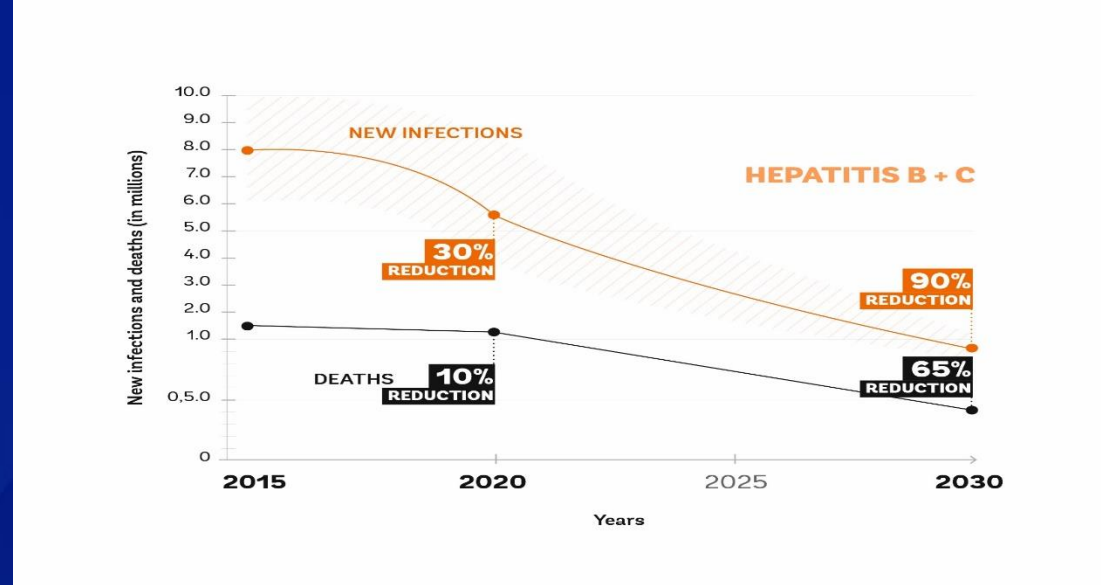
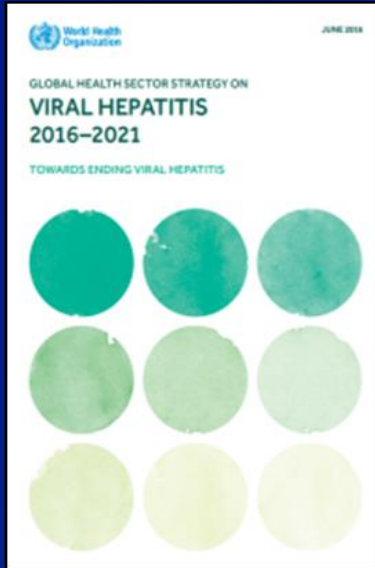
MAT + SSP together - 71% decline

MAT+ SSP + HCV cure - 90%



Global and National HCV Elimination Goals

A Rare Opportunity to Build Awareness and Advocacy



Elevates the national vision of what is possible with commitment and resources

Opportunities to engage new partners in disease elimination

Provides targets to evaluate progress toward elimination goals

Join the viral hepatitis elimination effort; Incorporate goals as expectations; revise strategic plans, program goals and performance targets to align with elimination goals (CDC, in progress)

Conclusions

- Despite being a highly mobile, hard-to-reach population that can be reluctant to access medical care, ***PWID can successfully engage in primary care***
- While significant staff time is spent on outreach activities including street searches, phone calls, social media contact, and home visits, the public health impact is large
- Leveraging existing services and utilizing patient navigation may result in the best outcomes
- These methods offer a successful framework for PWID involvement in other health care initiatives and for community based organizations working with this population.

Thank you!

Questions:

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