

Optimizing the Care Continuum for People with HIV and Opioid Use Disorder

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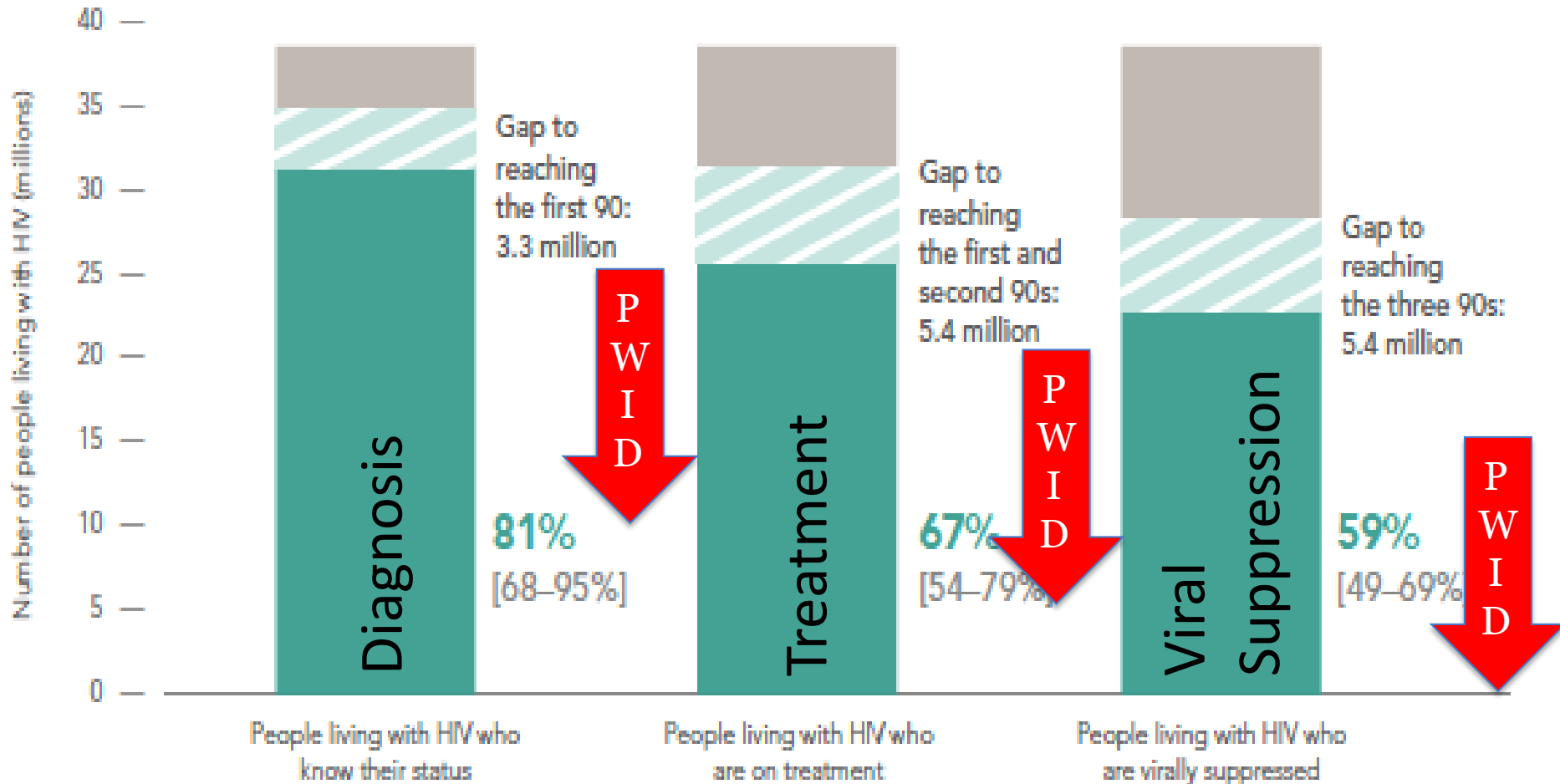


Disclosures and Funding

- Grants
 - *Merck, Gilead*
- Speaking Bureaus
 - *Gilead*
- Consulting
 - *Gilead, Abbvie*
- Stock – none
- Funding
 - CDC
 - SAMHSA
 - HRSA
- NIDA
 - R01 DA033679
 - R01 DA043125
 - R01 DA029910
 - U01 DA045384
 - R01 DA025943, R01 DA041271, R21 DA042702, R21 DA039842, R21 DA041953
- Fogarty (D43 TW011324, R21/R33 TW011663)
- NIAID (R21 AI152927, R25 TW009338)

The Global 90-90-90 Continuum (2019)

* Only 10 countries have met this target, none in regions with high proportion of PWID

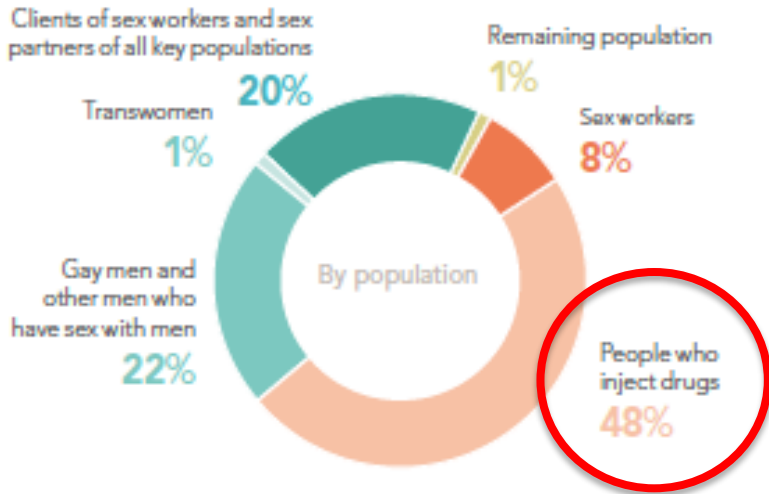


UNAIDS 2020

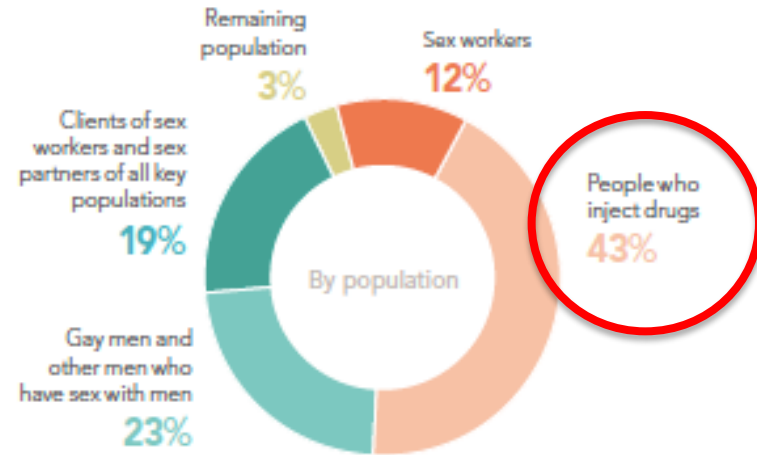
Uneven Distribution of HIV Infections in PWID (2019)

HIV Incidence & Mortality are Increasing

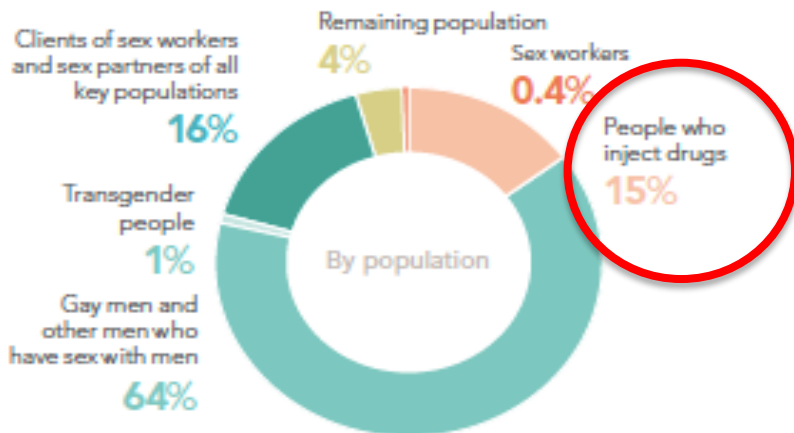
Eastern Europe and central Asia



Middle East and North Africa



Western and central Europe and North America



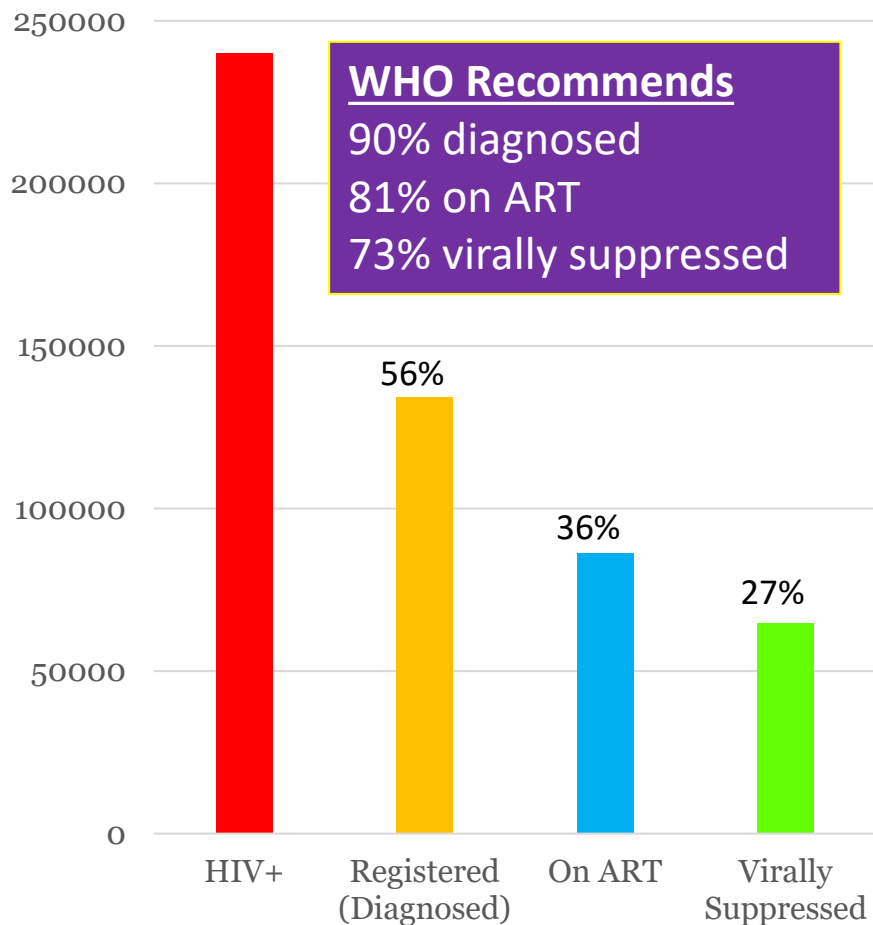
Asia and the Pacific



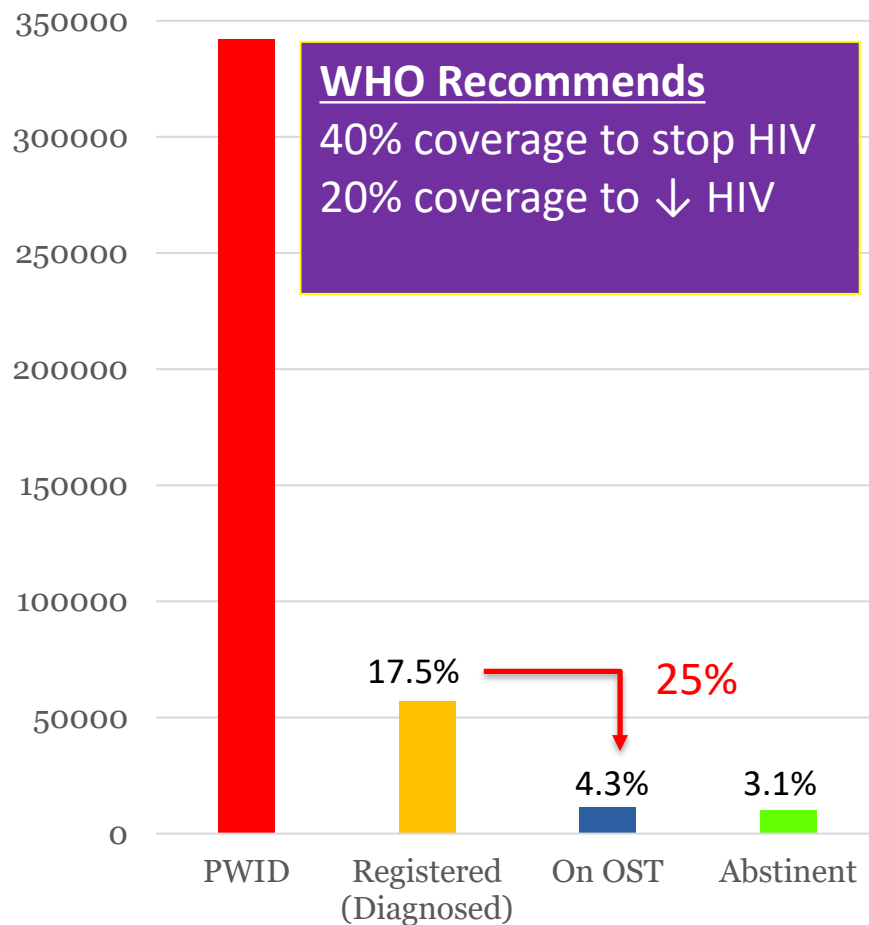
Treatment Cascades in Ukraine

HIV and Opioid Use Disorder

HIV (N=240,000)



PWID (N=336,000)

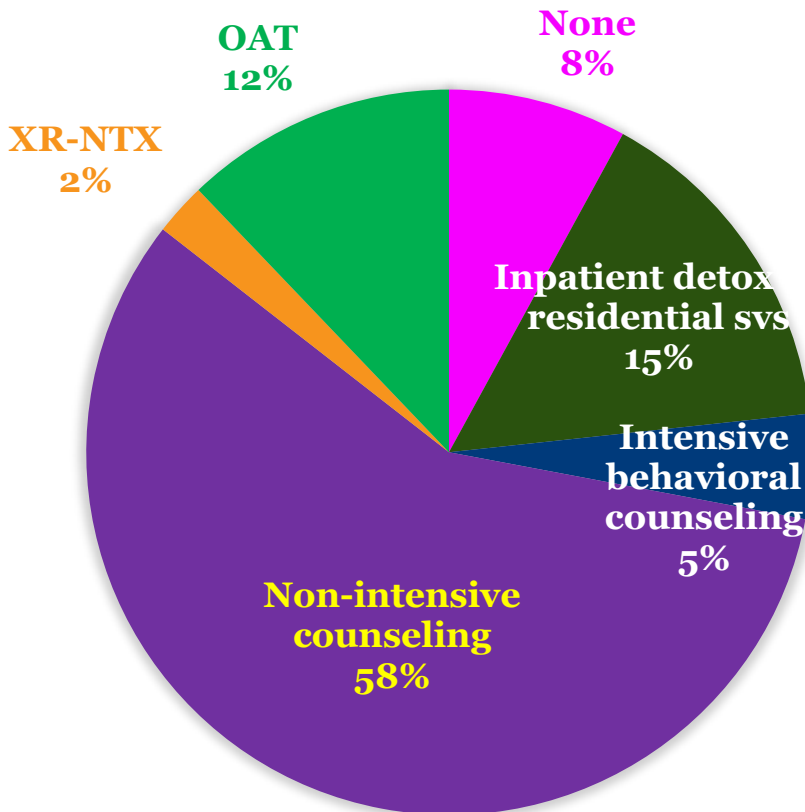


Opioid Agonist Therapies (OAT): *Methadone and Buprenorphine*

- 22 RCTs and multiple systematic reviews
- *Efficacy for addiction treatment*
 - Reduce opioid use and Rx retention (72% vs 9%)
 - Reduces injection (90% v 11%)
 - Reduces overdose, death and crime
 - Increases engagement in care, employment, HRQoL, and social functioning
 - Very cost-effective
- *Efficacy for HIV prevention*
 - Reduces HIV transmission risk (54%)
 - For PWH – it improves each step of the HIV care continuum

Treatment Pathways for Opioid Use Disorder: Disconnect Between Service Delivery and Benefits

TYPE OF TREATMENT



N=40,855 people with OUD

OVERDOSE OR SERIOUS HOSPITALIZATION

- Overdose
 - All other forms: NONE
 - OAT at 3 months: 76%
 - OAT at 12 months: 59%
- Serious Hospitalization
 - All other forms: NONE
 - OAT at 3 months: 32%
 - OAT at 12 months: 26%
- Longer duration on OAT was associated with even lower reductions!

Diagnosis

Engagement in Care

Viral Suppression



Intervention Touchpoints for PWID: HIV Testing

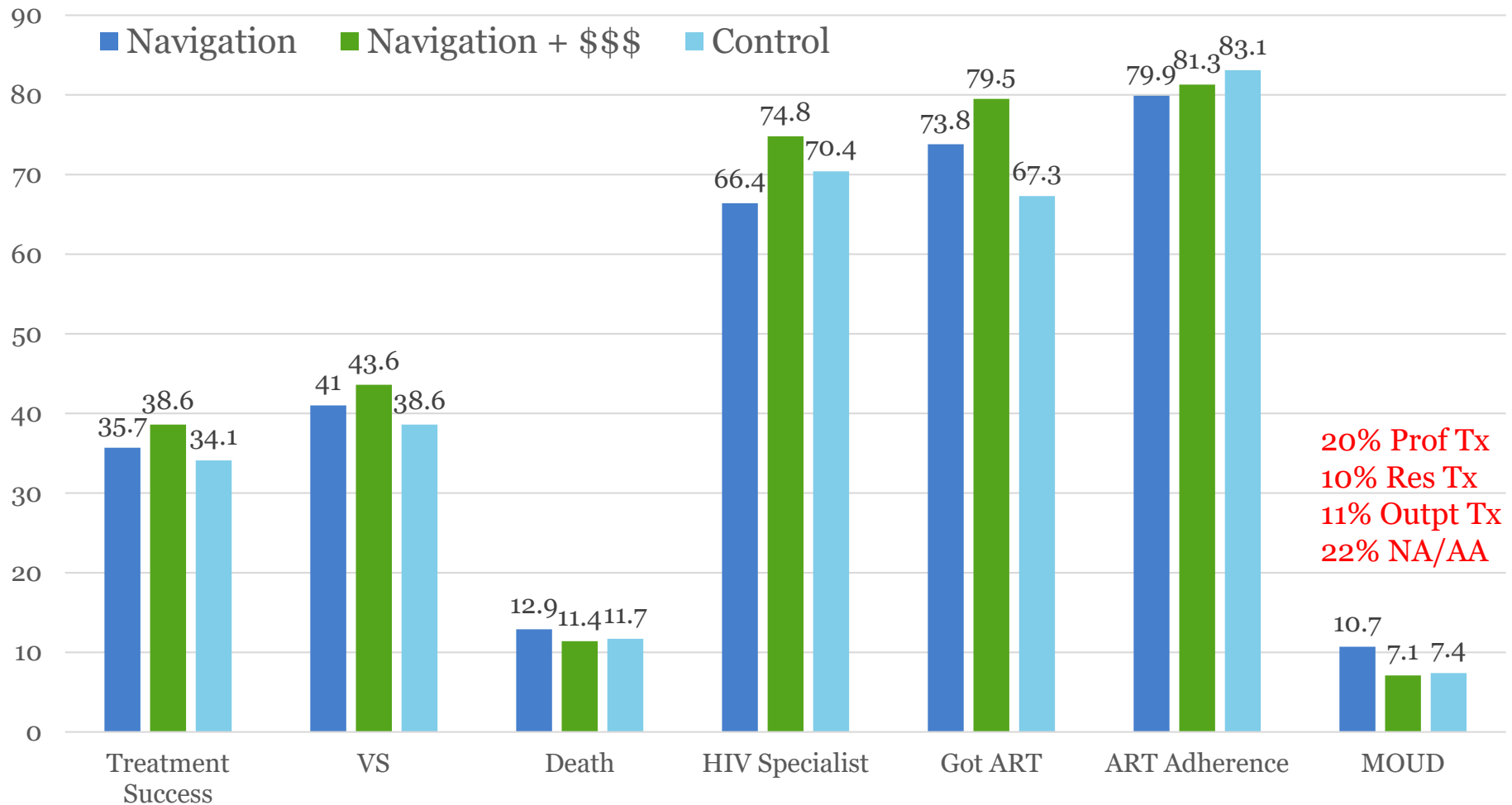


Linkage to and Retention in Care

- ARTAS (Strengths-based Case Management)
 - Evidence-based linkage to HIV Care in newly diagnosed patients
 - Was less effective for key constituencies like those with substance use disorders, mental illness and those who are out-of-care
- Patient Navigation³
 - Systematic review, with 17 or 20 finding a benefit mostly for those who were either out-of-care or deemed at high risk for being out-of-care
 - None focused on those with OUD
 - Quality of studies – weak
- Rapid Start Treatment (Seek & Treat)⁴
 - Several clinical trials and effectiveness studies
 - None involve those with OUD

1. Gardener L, AIDS, 2005; 2. Gardener L, AIDS Pt Care STDs, 2007; 3. Mizuno Y, AIDS 2018; 4. Ford, AIDS, 2018

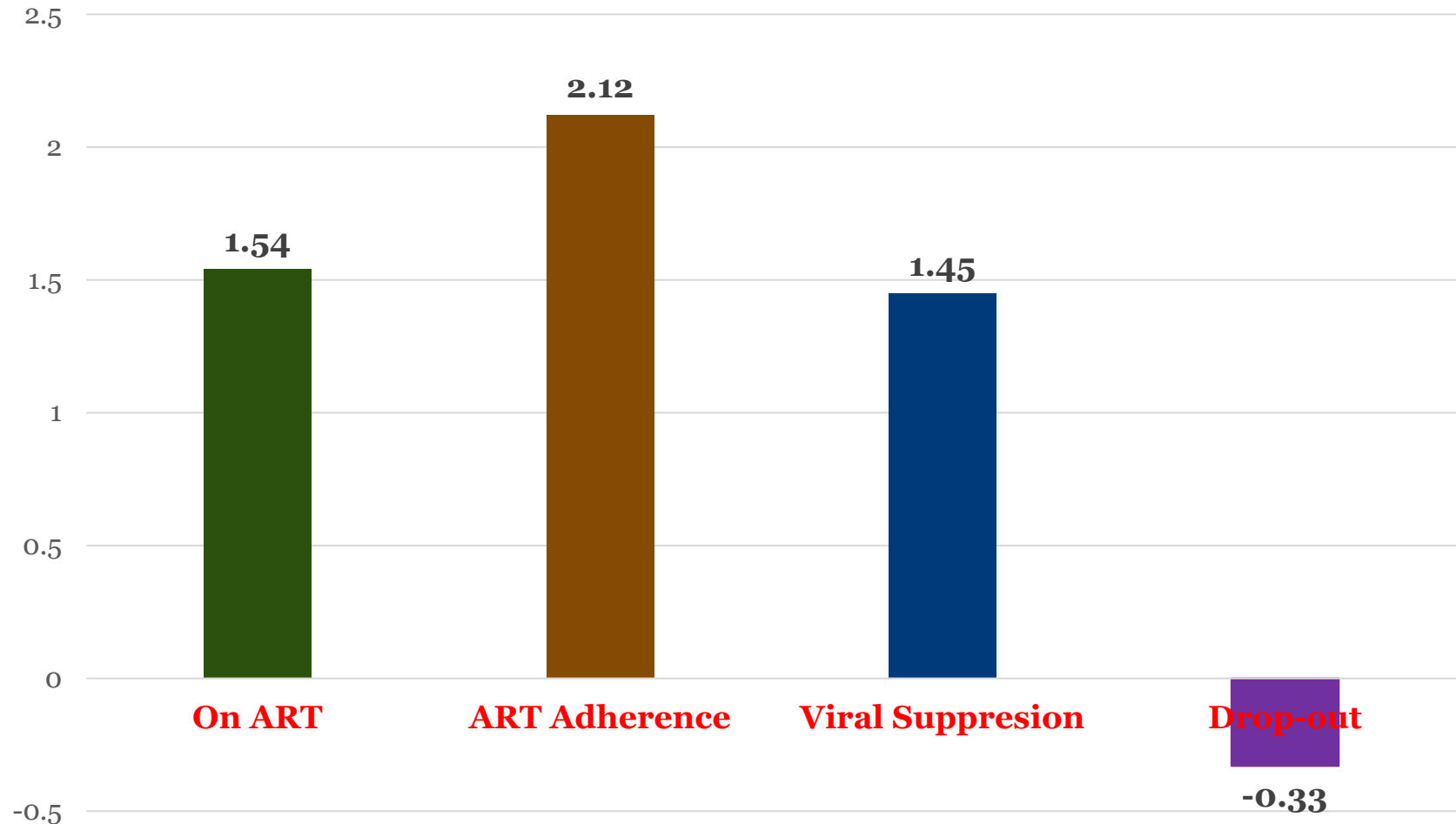
Comparison of Patient Navigation +/- Financial Incentives



Outcomes

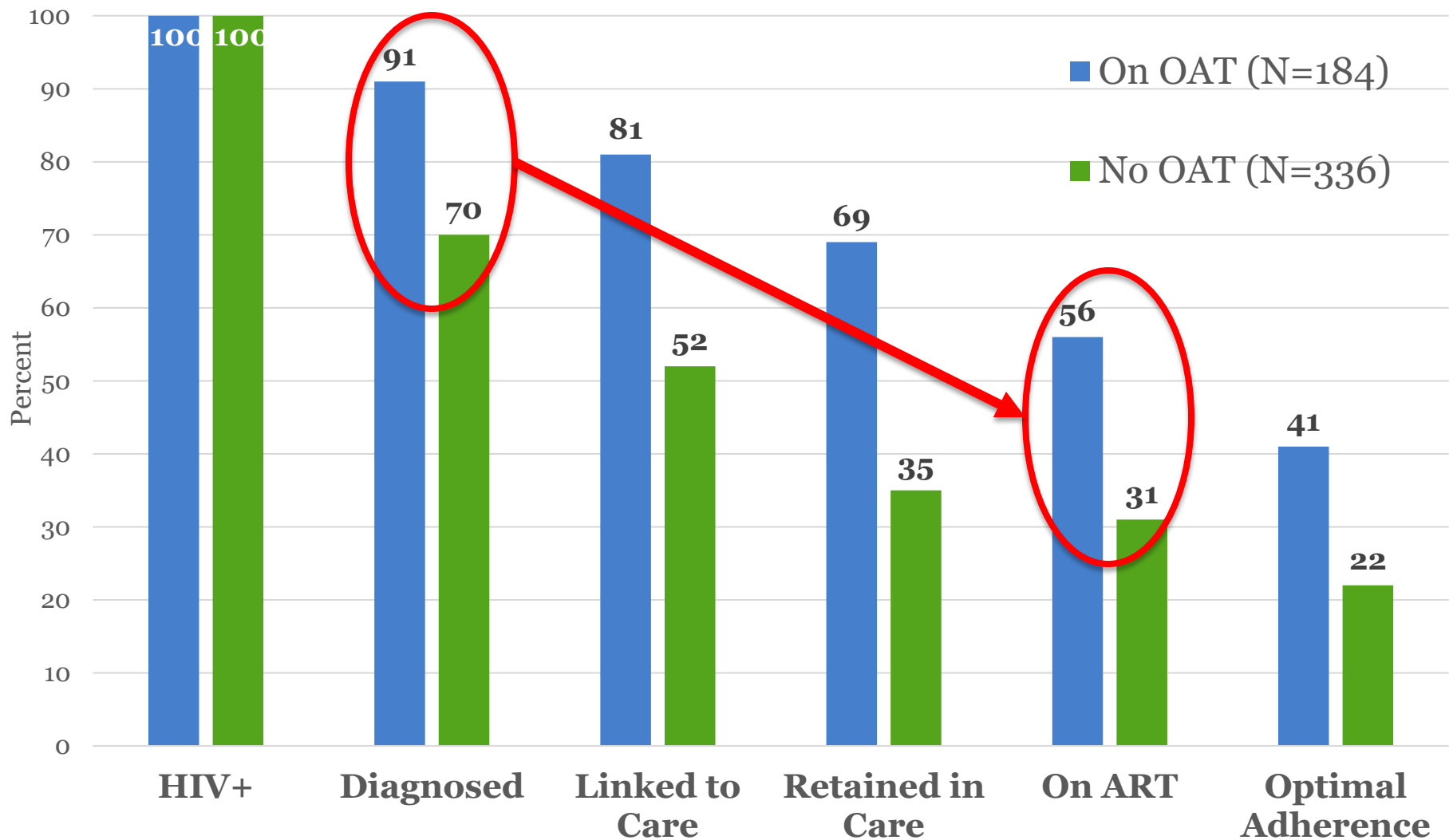
Metsch LR, JAMA, 2016

Impact of Treatment of Opioid Agonist Therapies on the HIV Treatment Cascade (Meta-Analysis)

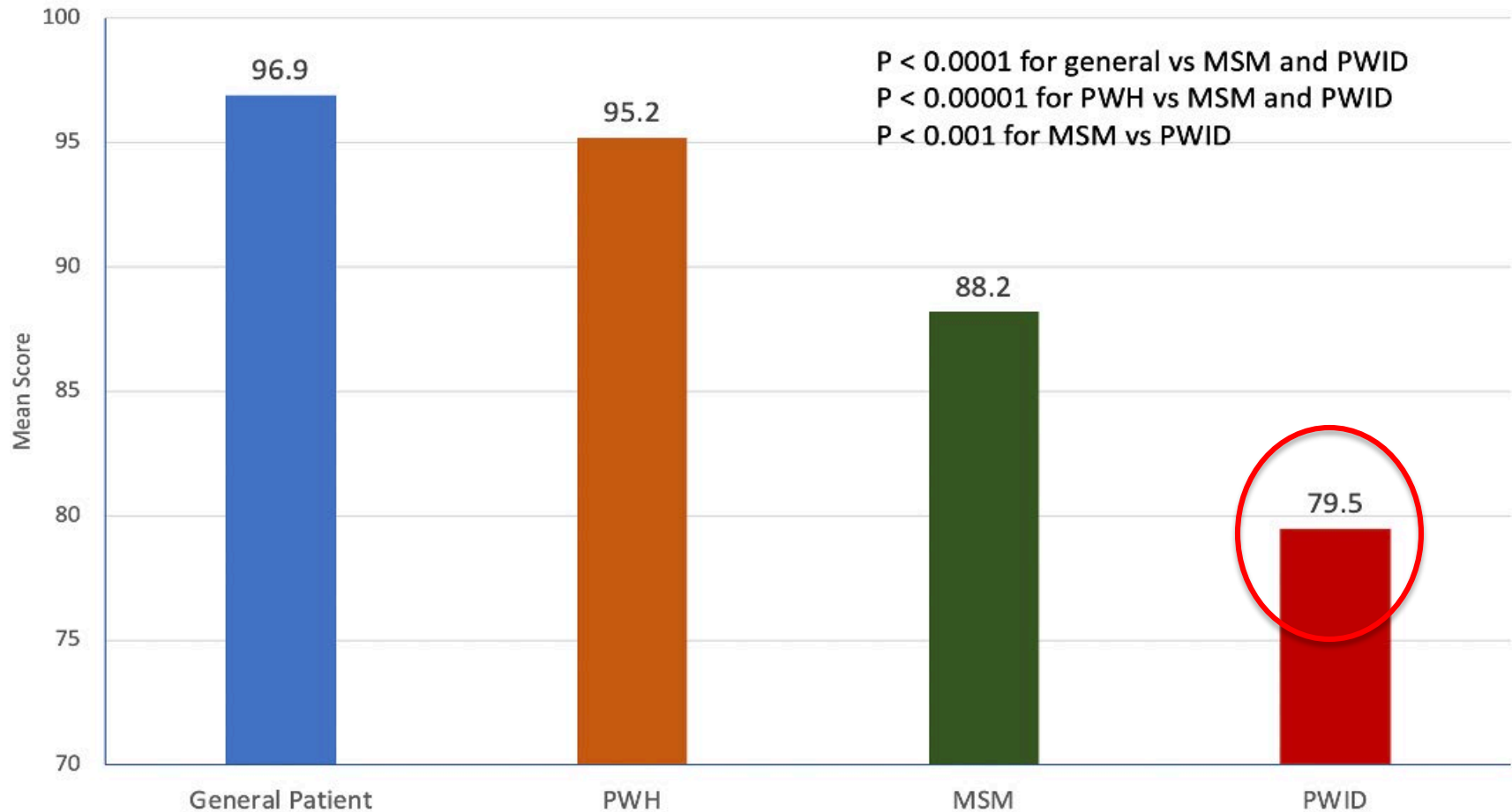


Low AJ, Clin Infect Dis, 2016

HIV Treatment Cascade in PWID in Ukraine



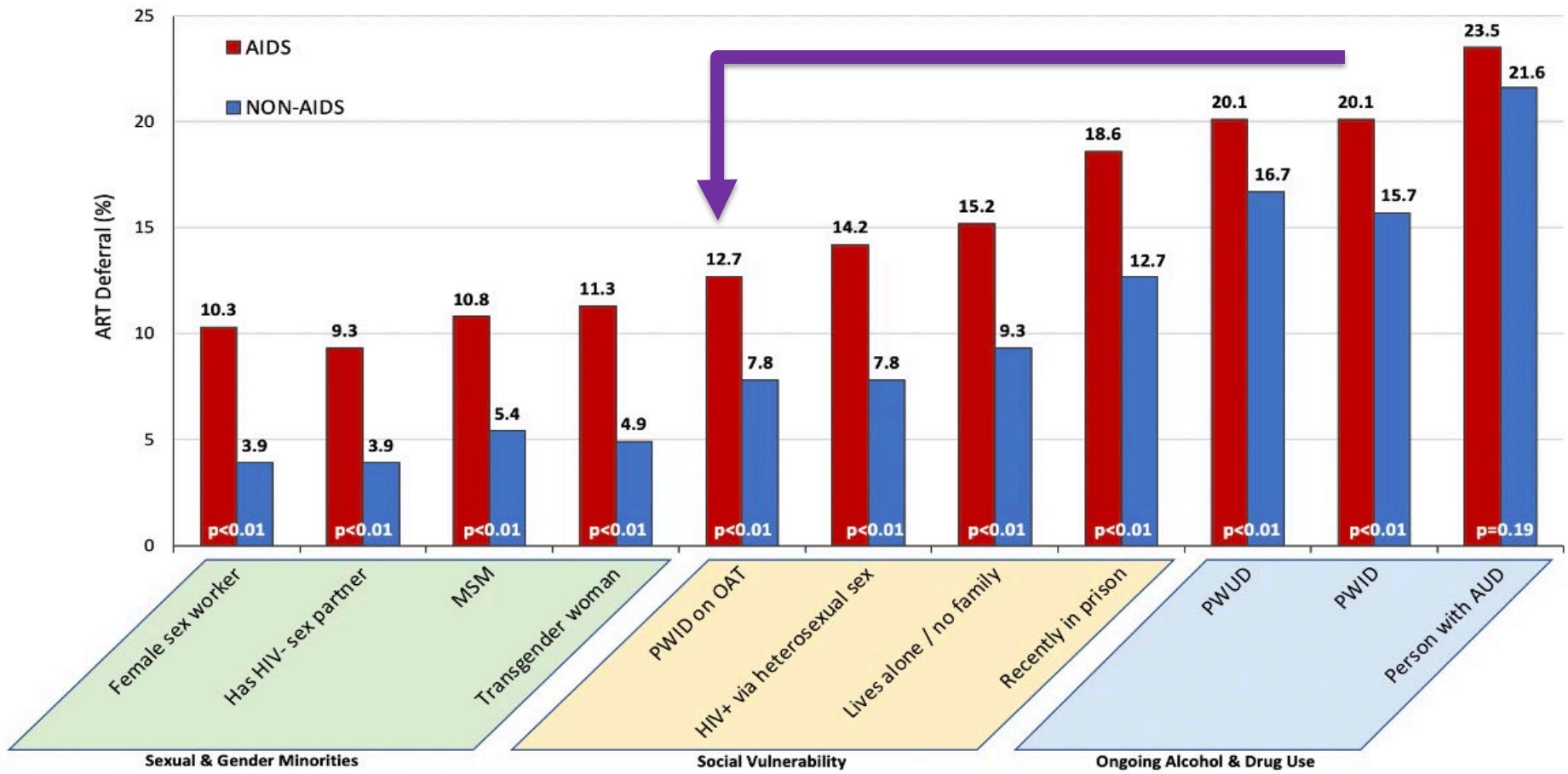
Attitudes Toward Key Populations by HIV Physicians in Ukraine (N=204)



PWH=person with HIV; MSM=men who have sex with men; PWID=person who injects drugs

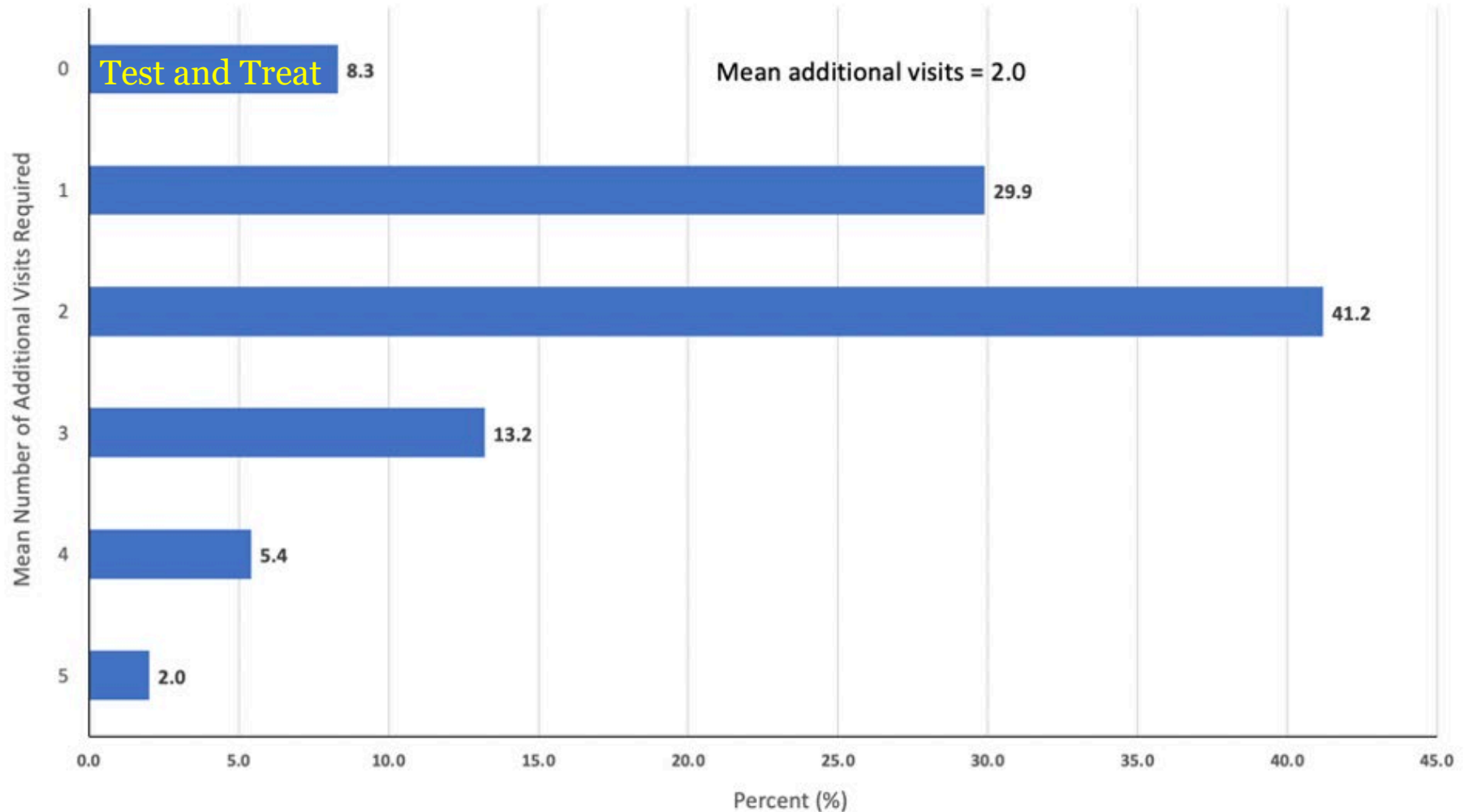
Ottesen T et al, under review

Decisions to Withhold ART for Key Populations in Ukraine (N=204)



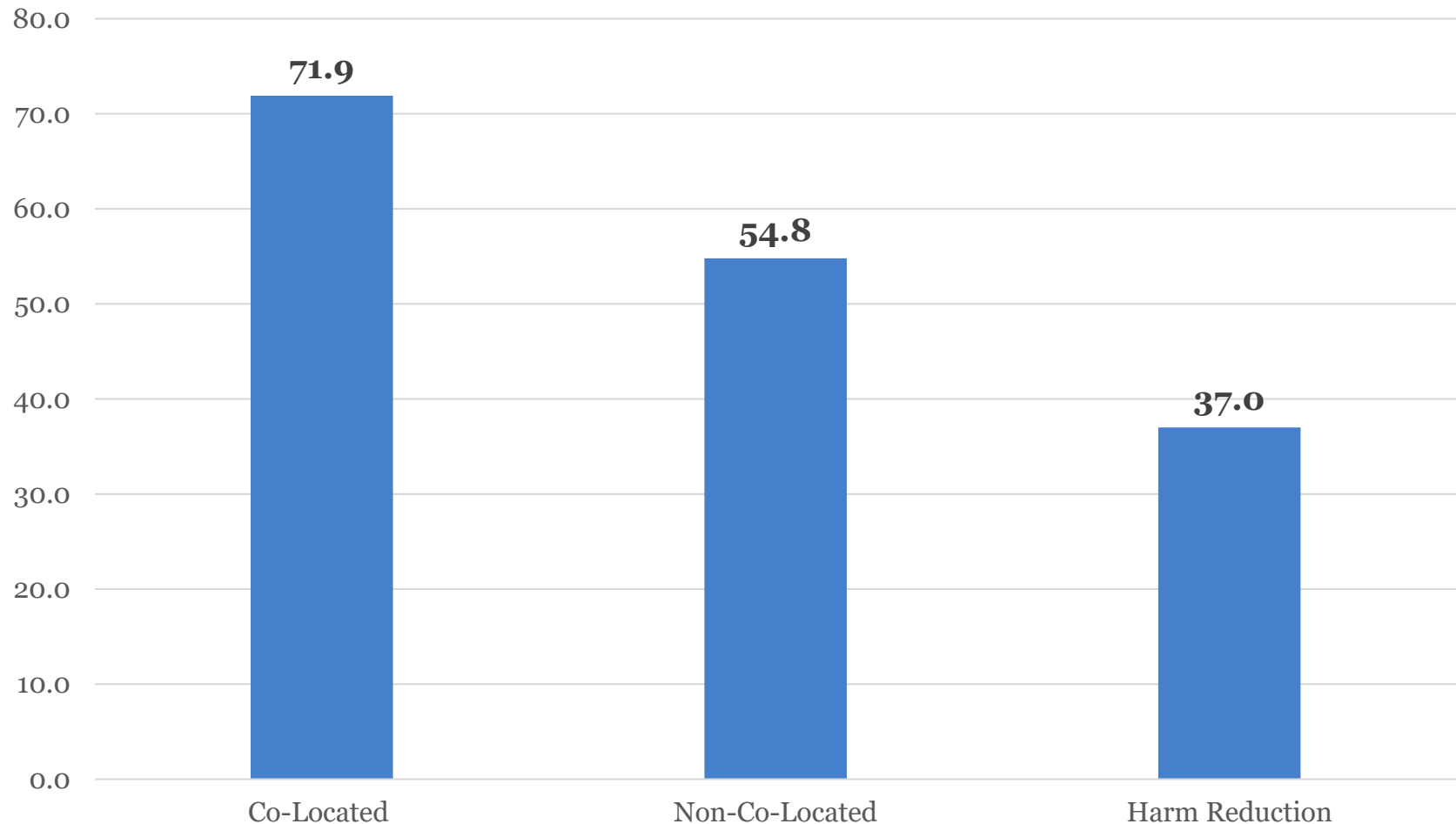
NOTE: AIDS defining diagnosis was defined as CD4+ count of <200 while non-AIDS defining diagnosis were defined as CD4+ count of >200

Number of Additional Clinic Visits Required Before Willing to Start ART in Ukraine



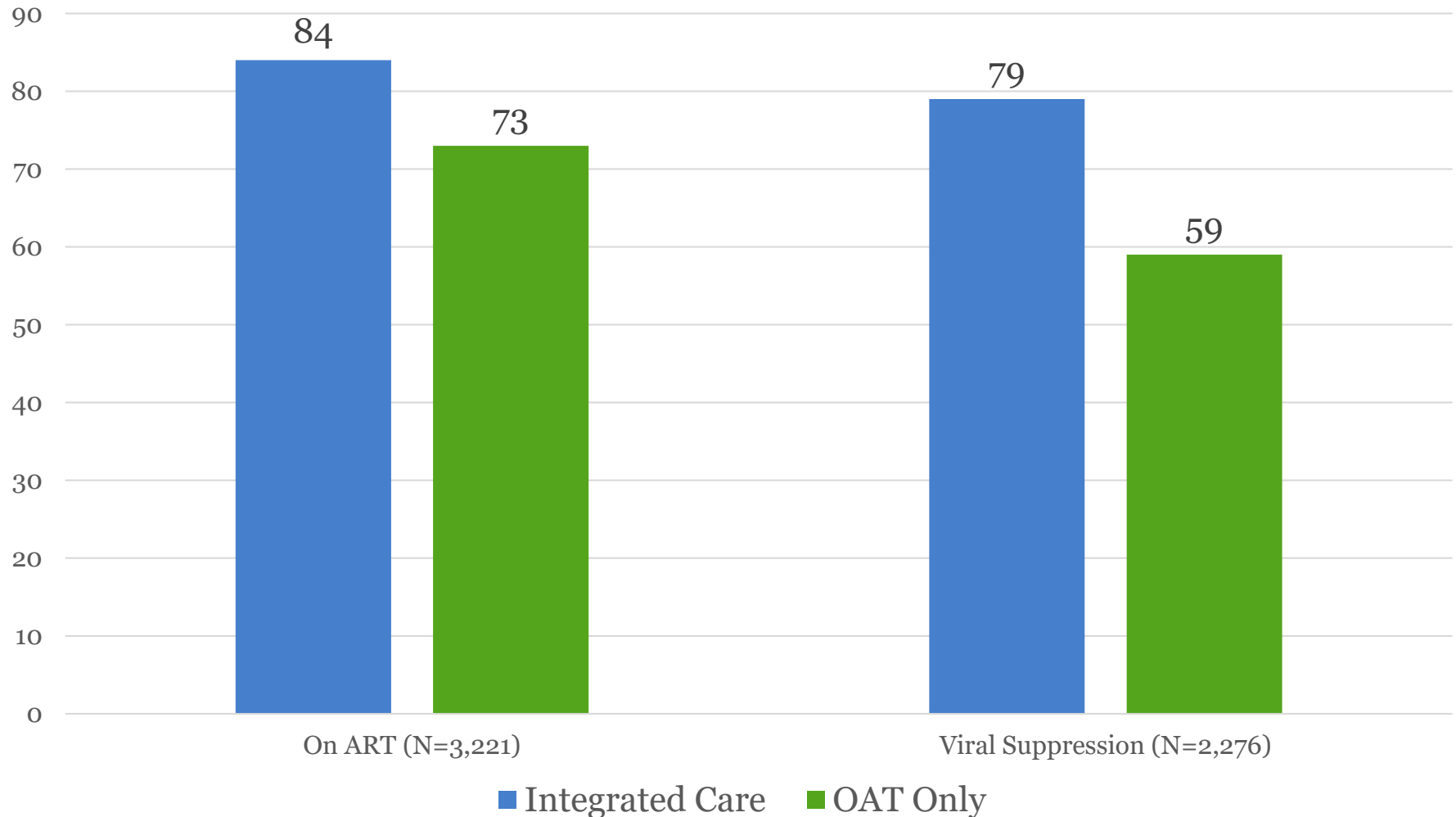
Ottesen T et al, under review

Integrated Care: Quality Health Indicators in Ukraine (N=296)*

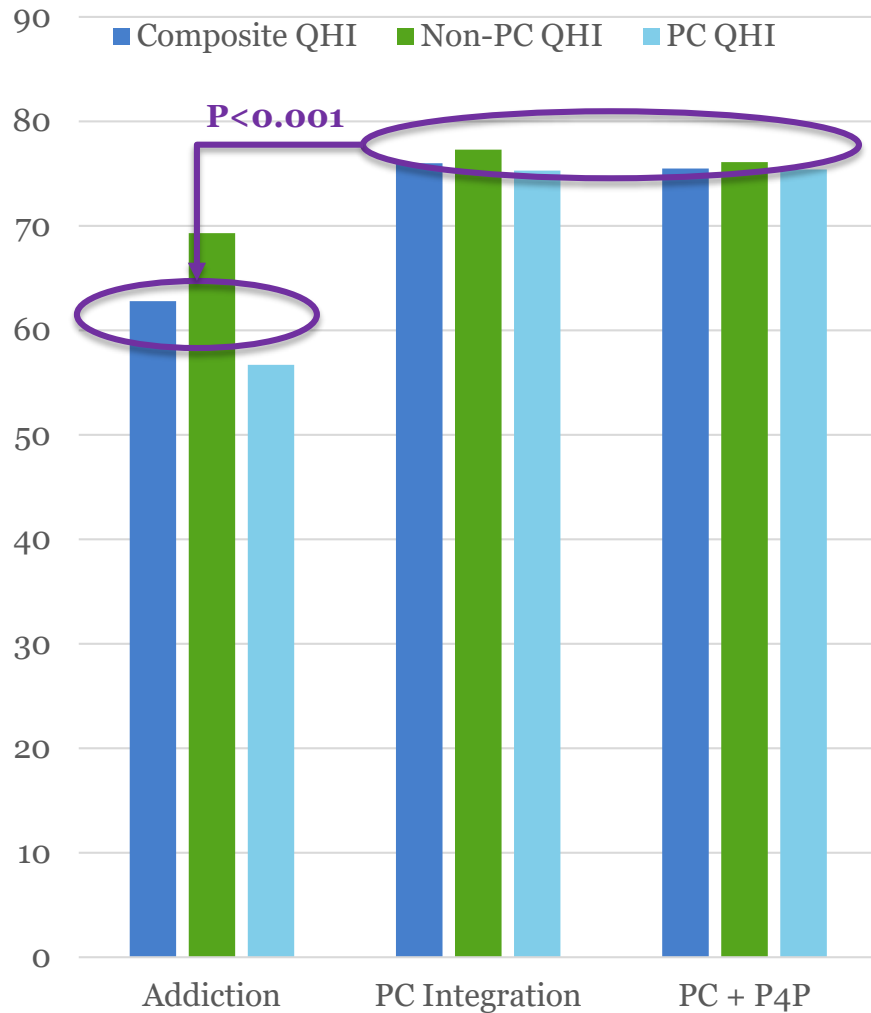


* Included quality of addiction HIV and TB outcomes

Patients with HIV and on OAT: Impact of Integrated Care on ART Prescription and Viral Suppression



Prospective Trial of Integrating MOUD into Primary Care Clinics in Ukraine: Early Results



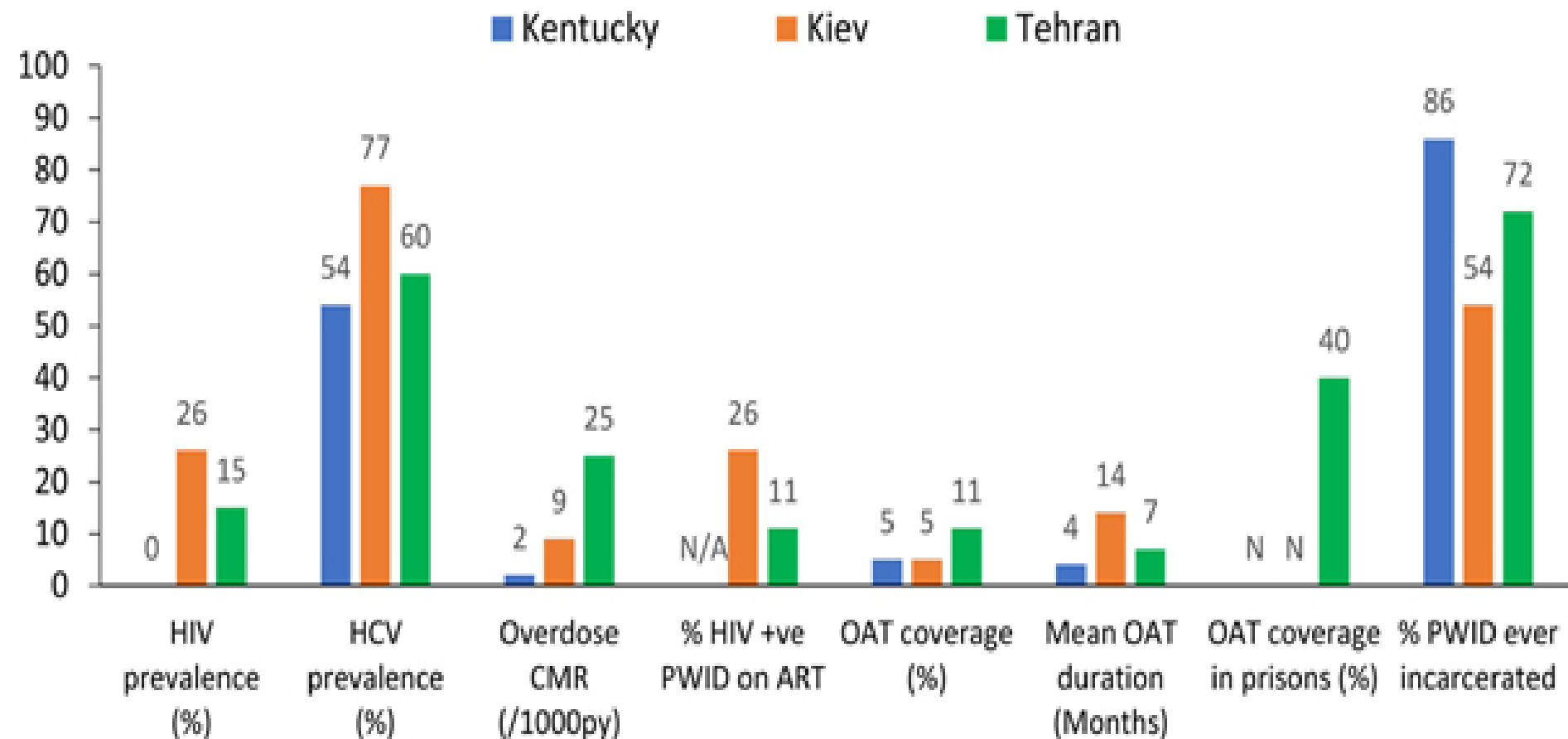
- Cluster RCT of integrating methadone into primary care
 - Control (methadone sites)
 - Methadone provided in primary care
 - Methadone provided in primary care with P4P
- Project ECHO provided to PC clinicians to guide specialty care for addiction, HIV and TB (and HCV)

Release from Prison for PWH

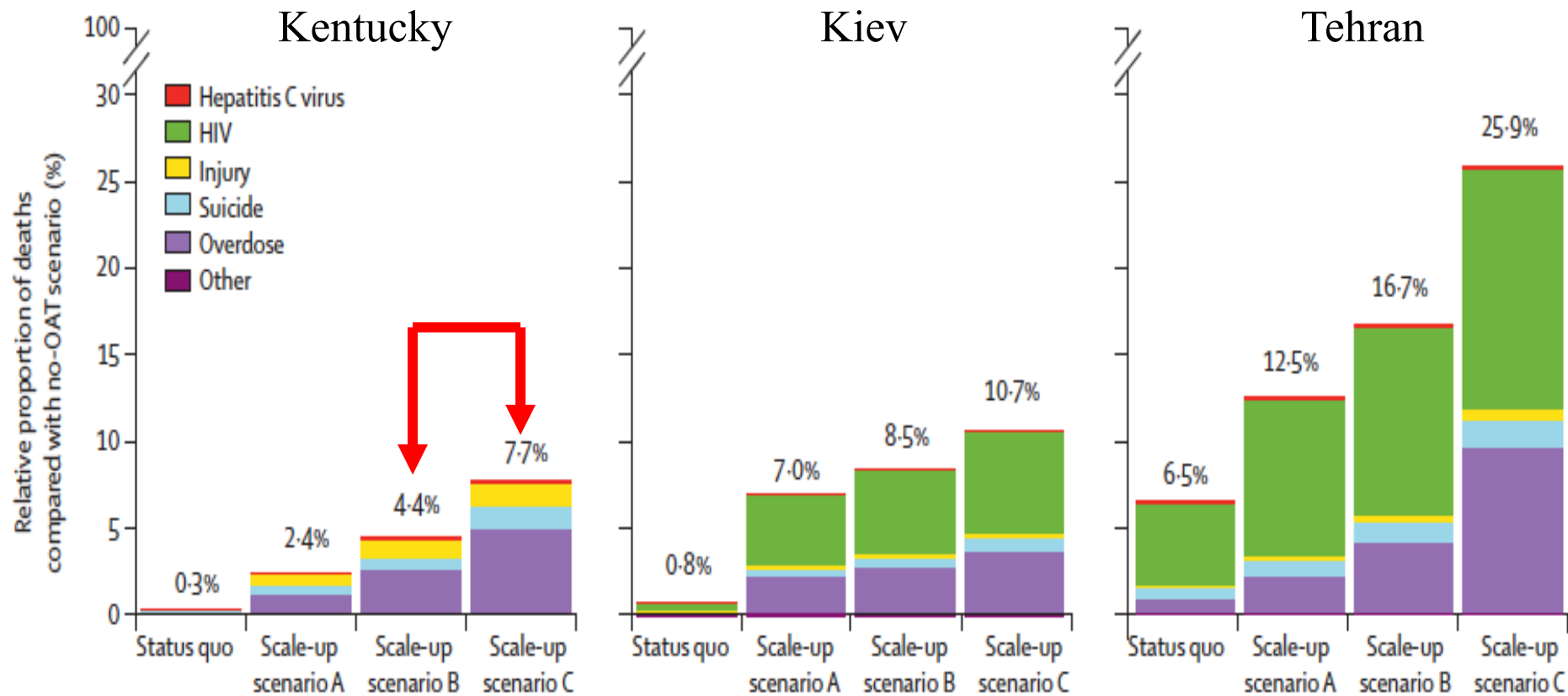
- High prevalence of OUD in PWH transitioning from prison
- Studies generally suggest:
 - Poor linkage to HIV care (21% within 14 days), with decreasing levels of viral suppression over time¹
 - Retention in care over 3 years after release markedly decreases and is higher for recidivists relative to first time incarceration²
 - Mortality is 8-fold higher for prisoners with HIV, relative to non-incarcerated PWH, with HIV contributing most to mortality (liver disease, overdose, accident)

1. Loeliger K, *Lancet HIV*, 2018; 2. Loeliger K, *Lancet HIV*, 2019; 3. Loeliger K, *PLoS Med*, 2018

Modeling OAT Scale-up and Death in PWID



Modeling OAT Scale-Up and Death



Status Quo: OAT coverage 5% (KY, Kiev) and 11% (Tehran)

Scenario A: 40% OAT in community

Scenario B: *plus* OAT retention increased to 2 years

Scenario C: *plus* 40% OAT in prison

Long-Acting Treatments – the future?

Potential for Synergy

- HIV
 - Cabotegravir
 - Rilpivirine
- Addiction (OUD)
 - XR-BPN
 - XR-NTX
 - Implantable NTX
 - Probuphine

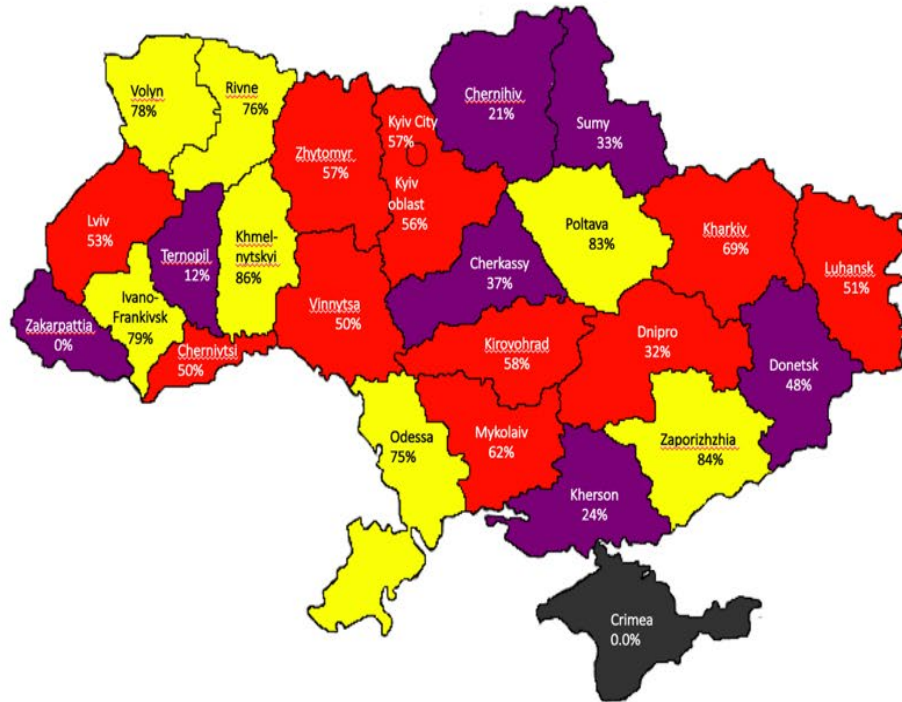


Patient Preferences
Retention Strategies

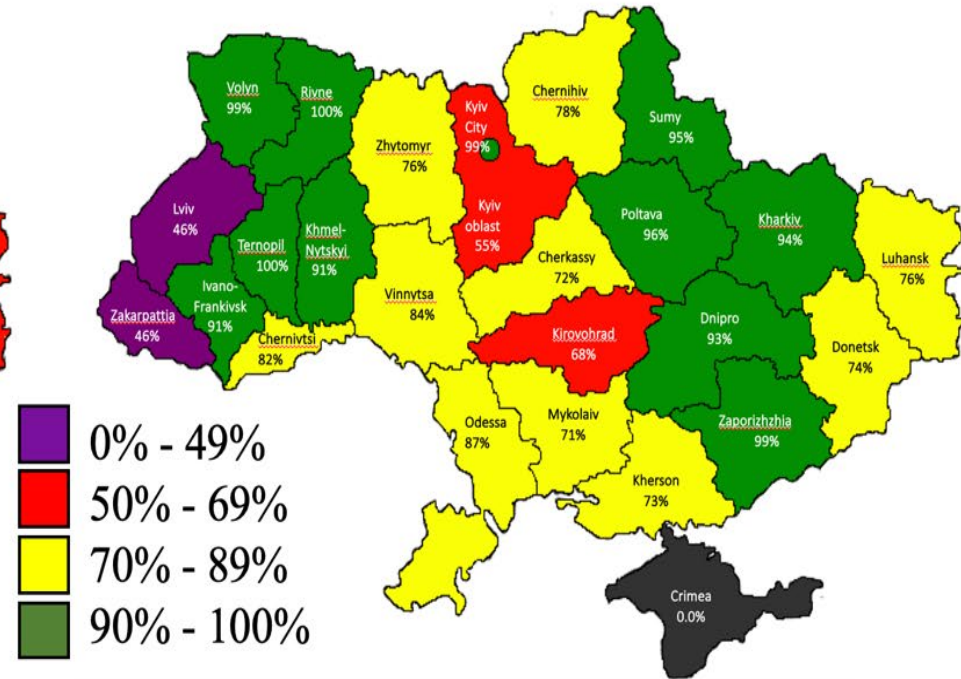
Intertwined Epidemics – COVID, Opioids, HIV

Turning Crisis into Opportunity

A. March 1st, 2020 (mean = 53.4%)



B. June 1st, 2020 (mean = 84.4%)



	Pre COVID-19 (Annualized)		COVID-19 (Annualized)		Difference (Annualized)	
	Contacts	Hours	Contacts	Hours	Contacts	Hours
3 Days	2,889,395	240,783	2,160,743	180,062	728,652	60,721
7 Days	2,376,220	198,018	1,412,268	117,689	963,952	80,329
10 Days	2,260,756	188,396	1,243,861	103,655	1,016,895	84,741

Mortality: 2019 (4.3%) --- Pre-COVID (5.0%) --- COVID (4.2%)

Summary: A Prescription for the Future

- HIV testing should be linked and routinely implemented in multiple touchpoints – e.g., harm reduction, health and addiction treatment settings, criminal justice system
- Great need to adapt rapid start ART treatment strategies – as a means to overcome clinician bias
 - Consider rapid start ART + MOUD!
 - Learn lessons from COVID-19 that reduces DEMANDS on patients and providers
- Integrate services where possible – integration, however, is highly variable
- Need for interventions that address multiple layers of stigma (HIV, OUD and MOUD, and incarceration)