

# **Transitioning street- recruited heroin users to HCV treatment using buprenorphine**

NIDA DA015629-01

Diana Sylvestre, MD  
University of CA, San Francisco  
OASIS (Organization to Achieve Solutions in  
Substance-Abuse)

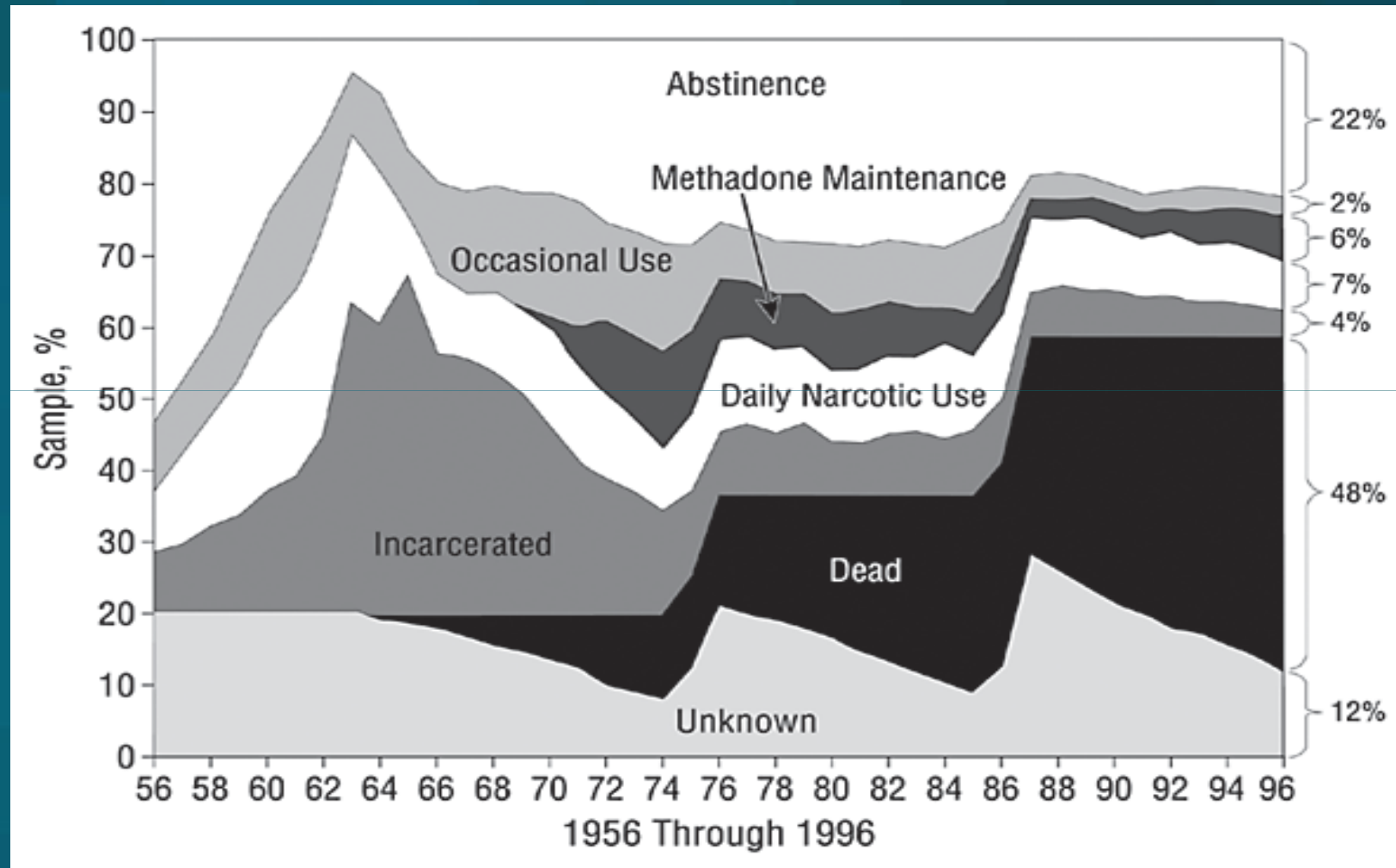
# HCV and addiction: an insurmountable problem?

- 70% of IDUs in US exposed
  - Easily transmitted
- Treatment can be toxic
  - Often “contraindicated”
    - Medical
    - Psychiatric
- Reinfection?

# A different perspective

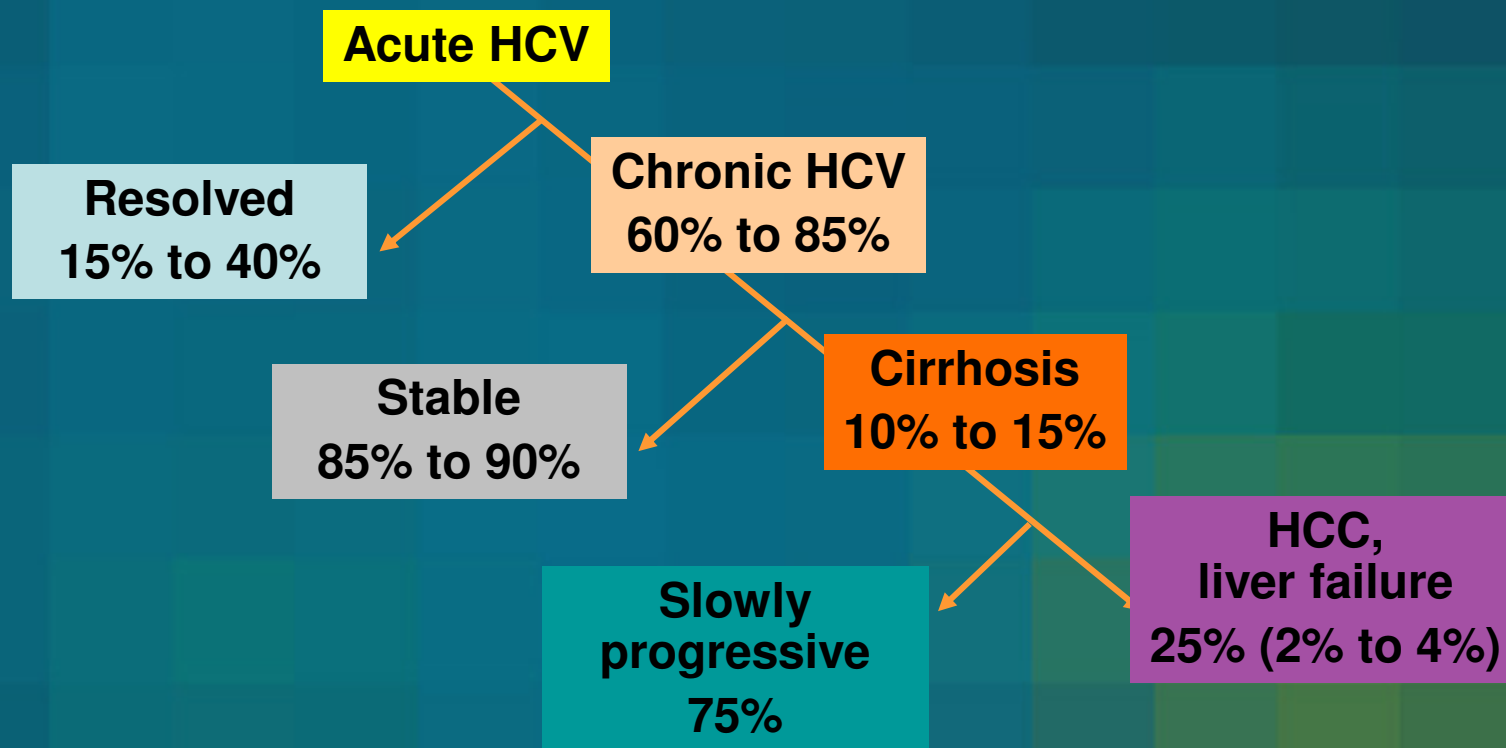
	Addiction	HCV
Pharmacologic therapy	Yes (+/-)	Yes
Treatment duration	Indefinite	24-48 weeks
Cure	No	Yes

# Natural history: addiction



Hser, Y. I., et al. (2001) *Arch Gen Psychiatry*, 58, 503-8.

# Natural History of HCV Infection



NIH Management of Hepatitis C Consensus Conference Statement. June 10-12, 2002. Available at: <http://consensus.nih.gov/2002/2002HepatitisC2002116.html>. Accessed April 10, 2007.

**How should we  
intervene?**

# Priority

- Addiction?
- HCV?

# Priority

- Diabetes?
- High blood pressure?

# Priority

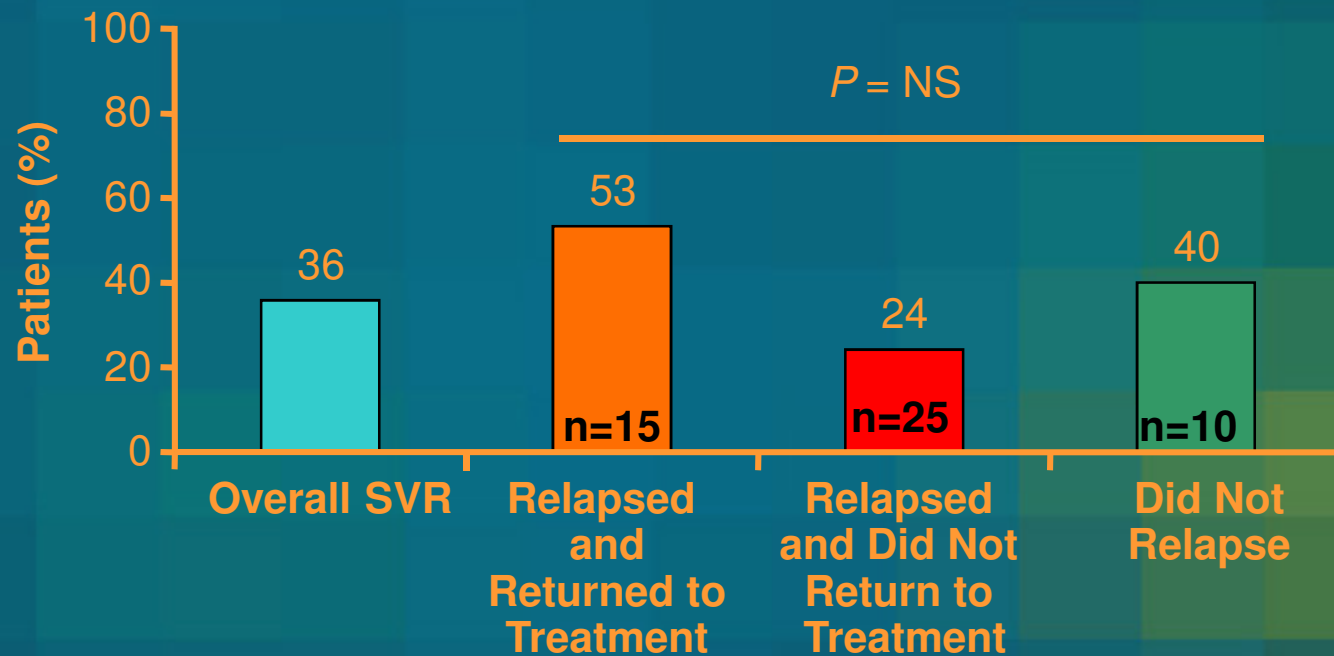
- Diabetes AND high blood pressure
- Addiction AND hepatitis C

# **HCV Treatment Recommendations: 2002**

“HCV therapy has been successful even when the patients have not abstained from continued drug or alcohol use... Thus, it is recommended that treatment of active injection drug use be considered on a case-by-case basis, and that active injection drug use in and of itself not be used to exclude such patients from antiviral therapy.” --NIH Consensus Statement on HCV, 2002

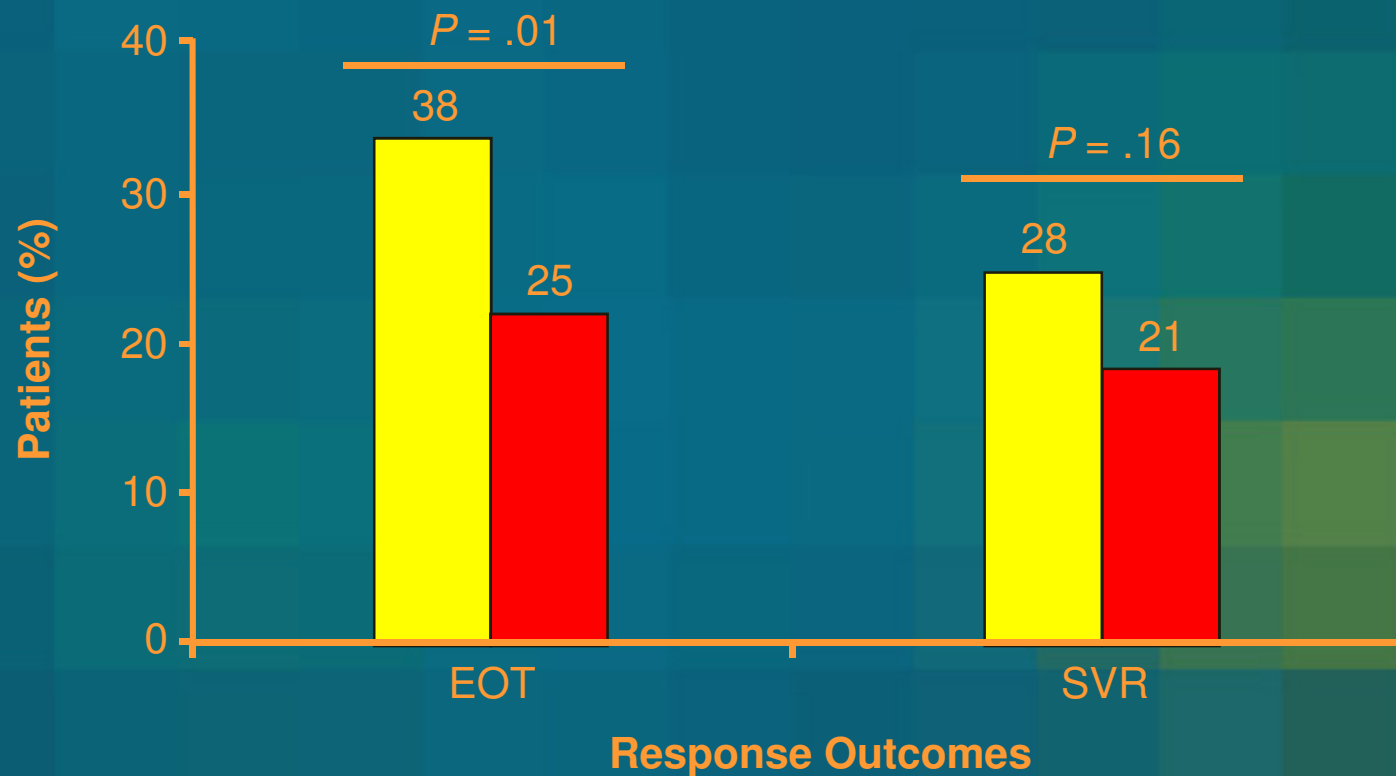
# HCV Treatment in Methadone Patients

SVR Rates in Injection Drug Users on Methadone Detox (N = 50)



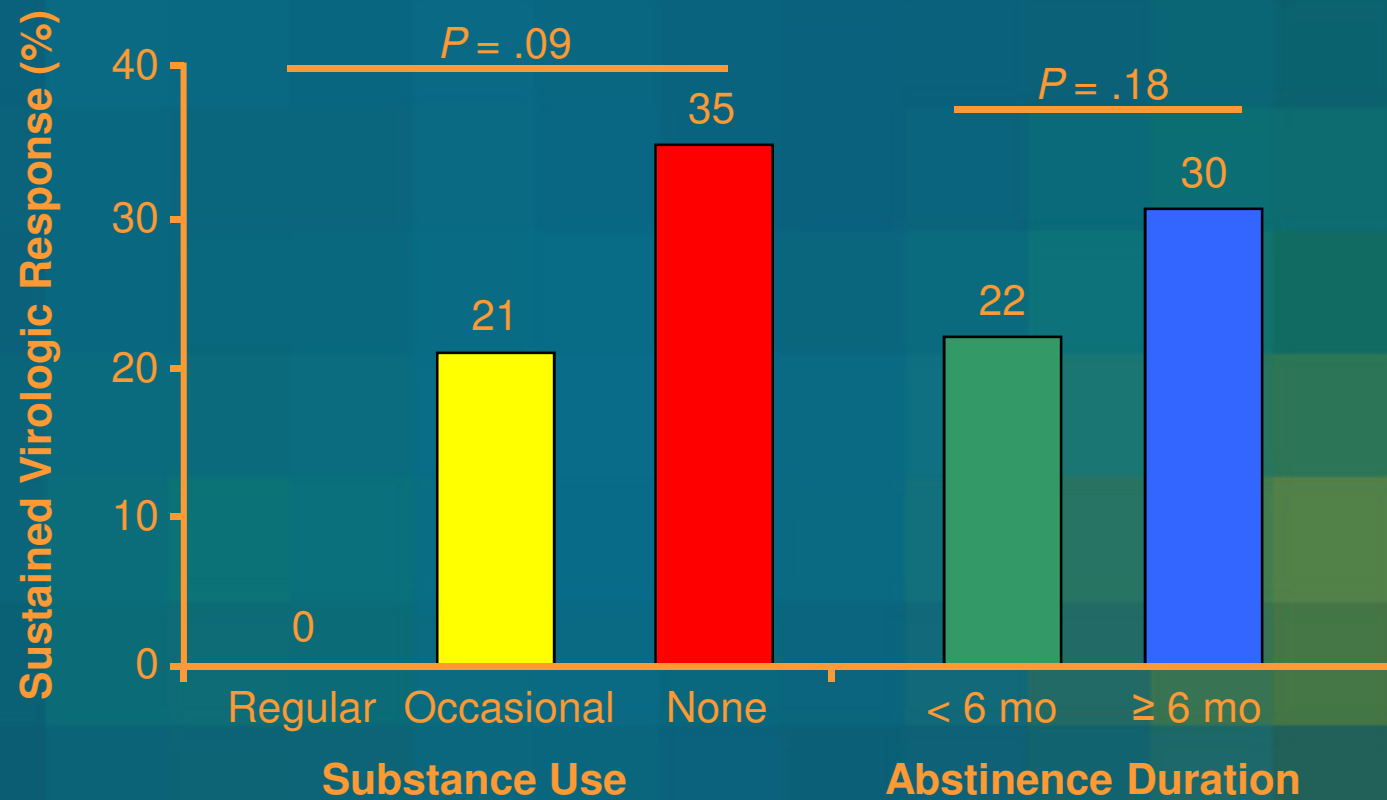
# HCV Treatment Outcomes in Methadone Patients

■ Patients on methadone maintenance (n=50) ■ Controls (n=50)



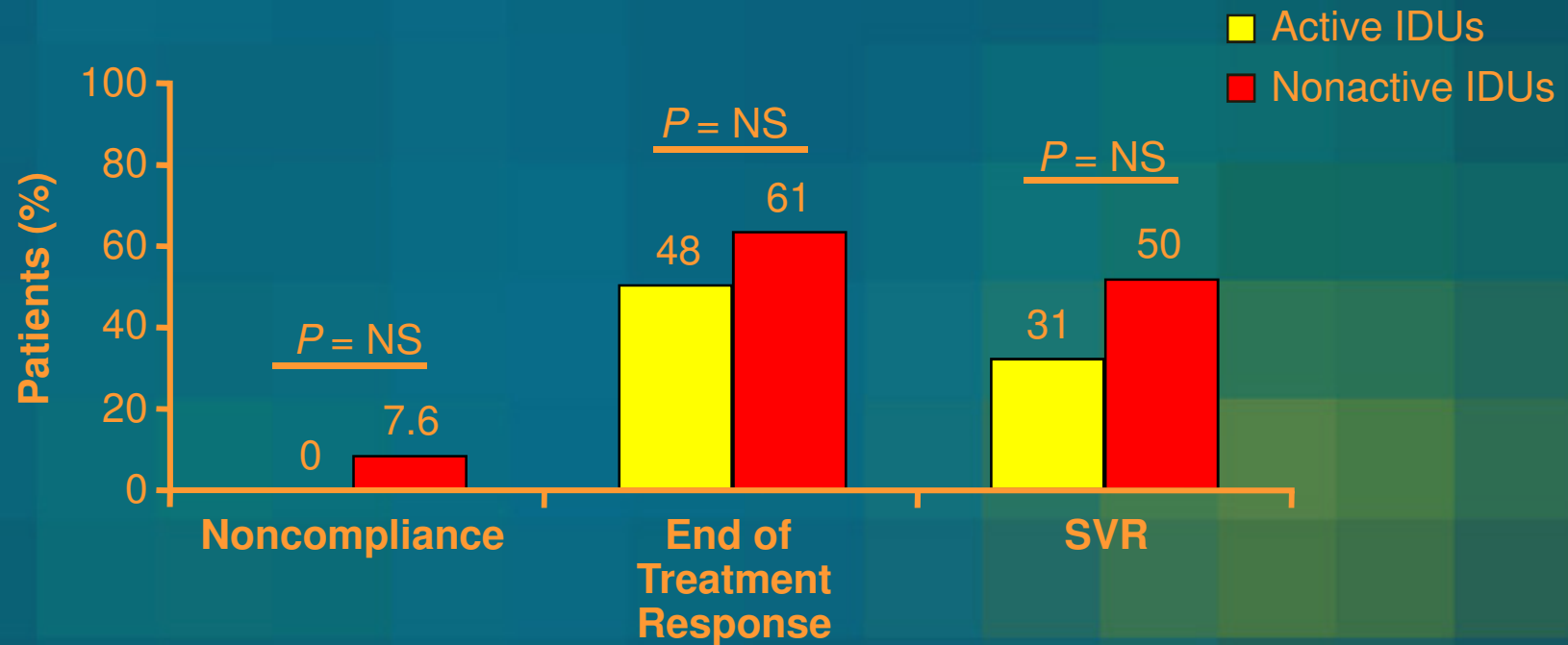
# HCV Treatment Outcomes in Methadone Patients

Degree of Drug Use and SVR (N = 76)



# HCV Treatment in the Setting of Active Drug Use

HCV Treatment Outcomes: Active IDUs vs Nonactive IDUs (N = 406)



# **Approaches to Intervention:**

**O.A.S.I.S. Study**

# Our setting









# Our situation

- Poverty, high rates of drug use
  - Heroin, crack cocaine, methamphetamine
- Very high HCV seroprevalence
  - ~95% of IDUs
- Low rates of health insurance
  - Limited access to medical care
  - Limited access to drug treatment
- Syringe exchange is disliked but tolerated
  - (usually)

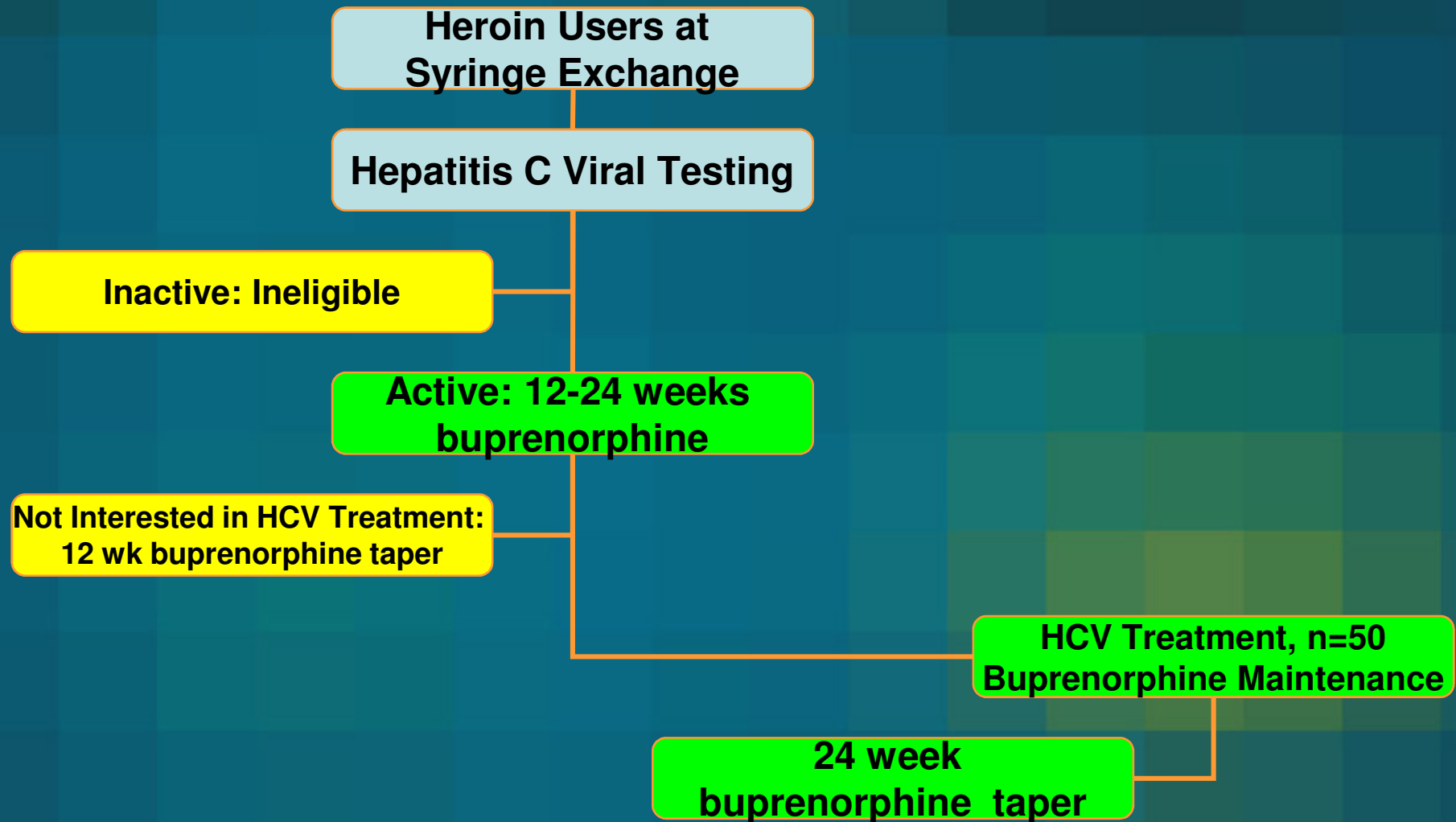




# Hypothesis

- Active, street-recruited heroin users can be safely and successfully treated for hepatitis C after 12-24 weeks of buprenorphine stabilization.

# Study Design



# Criteria for initiating HCV treatment

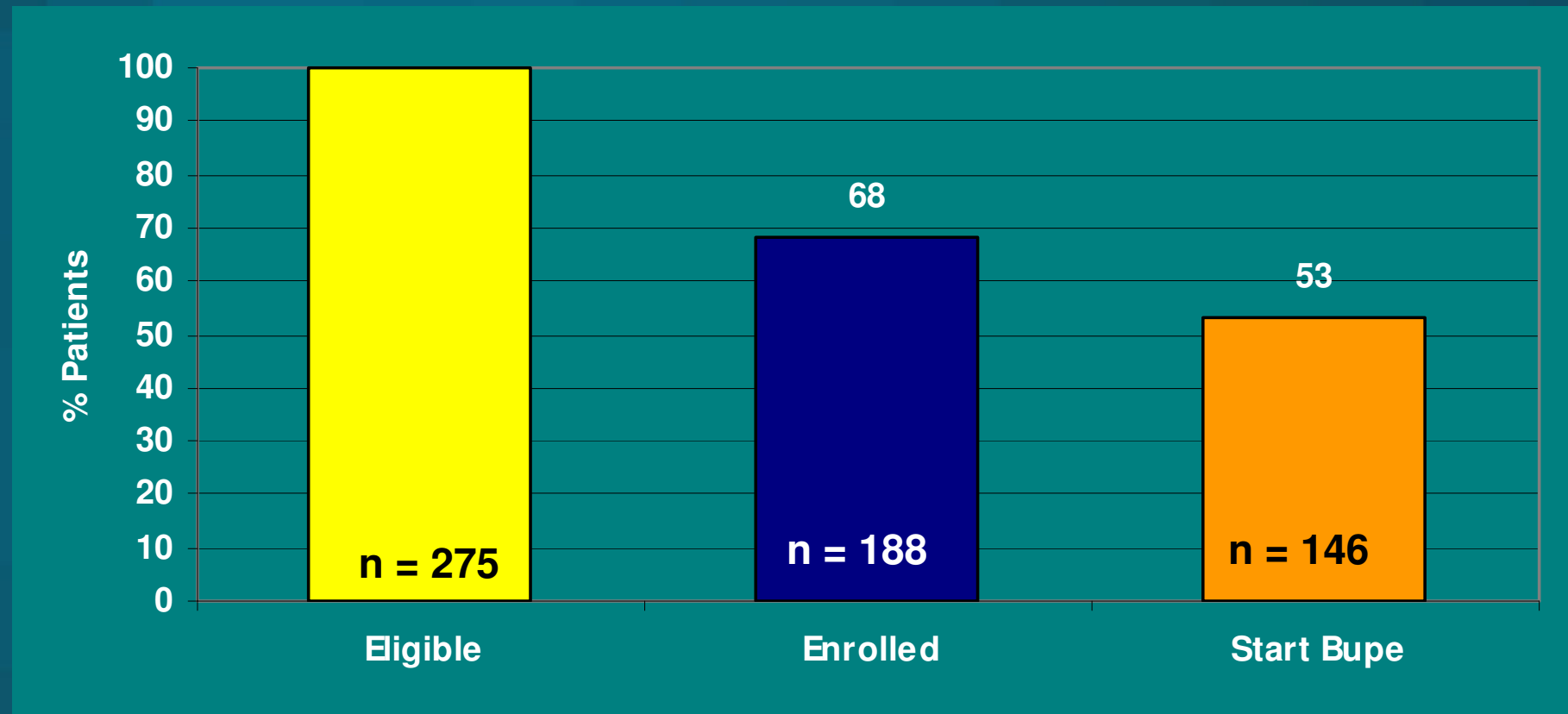
- Active HCV
- Interested
- Attendance of >75% of weekly education sessions

# Enrollment

- All screened = 415
- Eligible = 275
  - Ineligible = 140 (33%)
    - Not viremic = 94 (23%)
    - On methadone = 29 (7%)
    - No opioid addiction = 17 (4%)

# Relevance

All Screened: n=415



# The study sample is representative

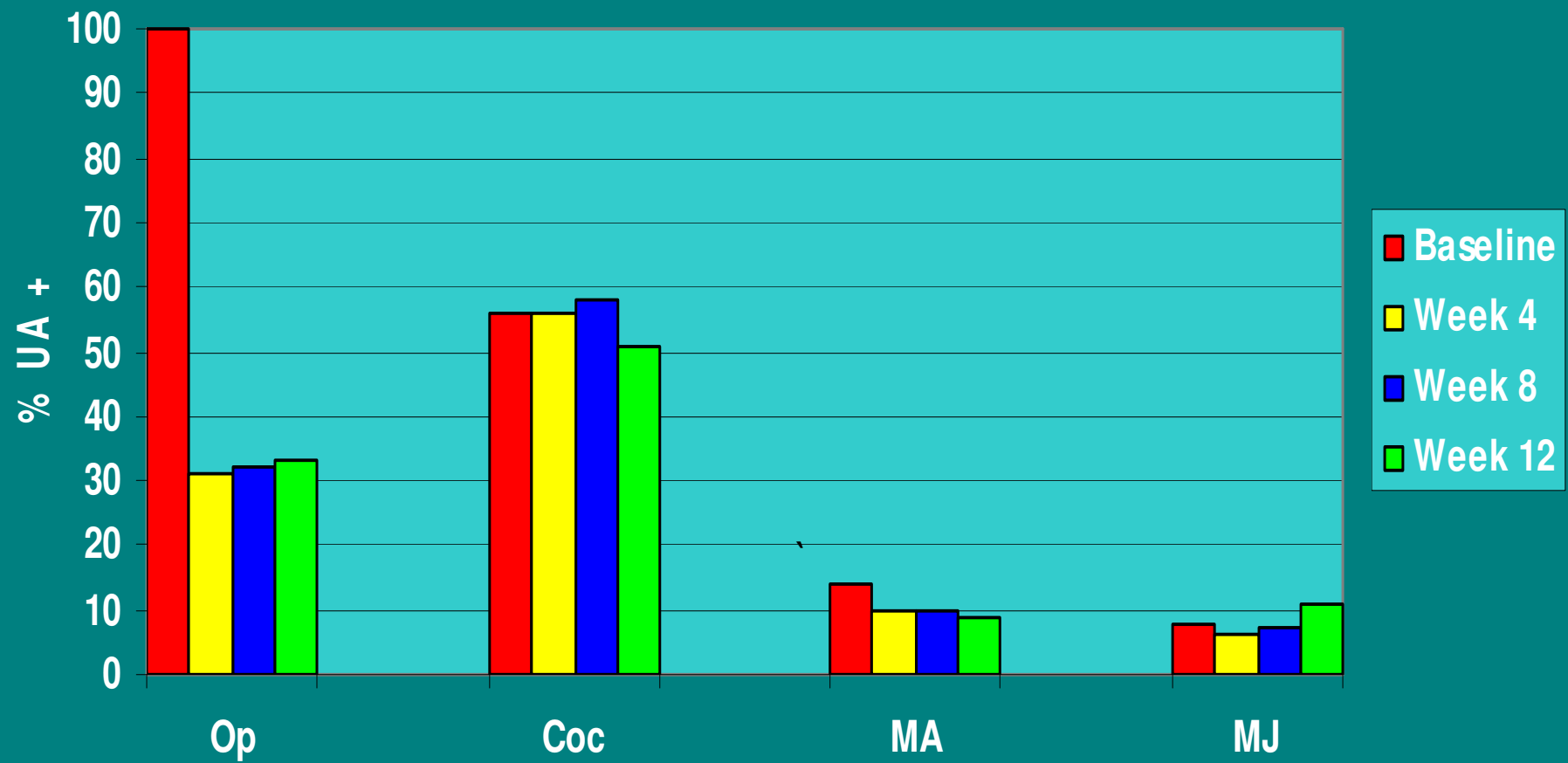
	Screened	Eligible	Enroll	Start Study Meds	P Value
<b>n</b>	<b>415</b>	<b>275</b>	<b>188</b>	<b>146</b>	
<b>Age</b>	<b>46</b> <b>(20-69)</b>	<b>46</b> <b>(24-69)</b>	<b>46</b> <b>(24-64)</b>	<b>46</b> <b>(24-64)</b>	<b>NS</b>
<b>Male</b>	<b>70.4%</b>	<b>74.9%</b>	<b>73.9%</b>	<b>71.2%</b>	<b>NS</b>
<b>White</b>	<b>34.5%</b>	<b>32.0%</b>	<b>31.9%</b>	<b>33.6%</b>	<b>NS</b>
<b>Black</b>	<b>37.3%</b>	<b>40.0%</b>	<b>39.4%</b>	<b>41.8%</b>	<b>NS</b>
<b>Latino</b>	<b>23.9%</b>	<b>23.6%</b>	<b>23.4%</b>	<b>19.2%</b>	<b>NS</b>

# The study sample is representative

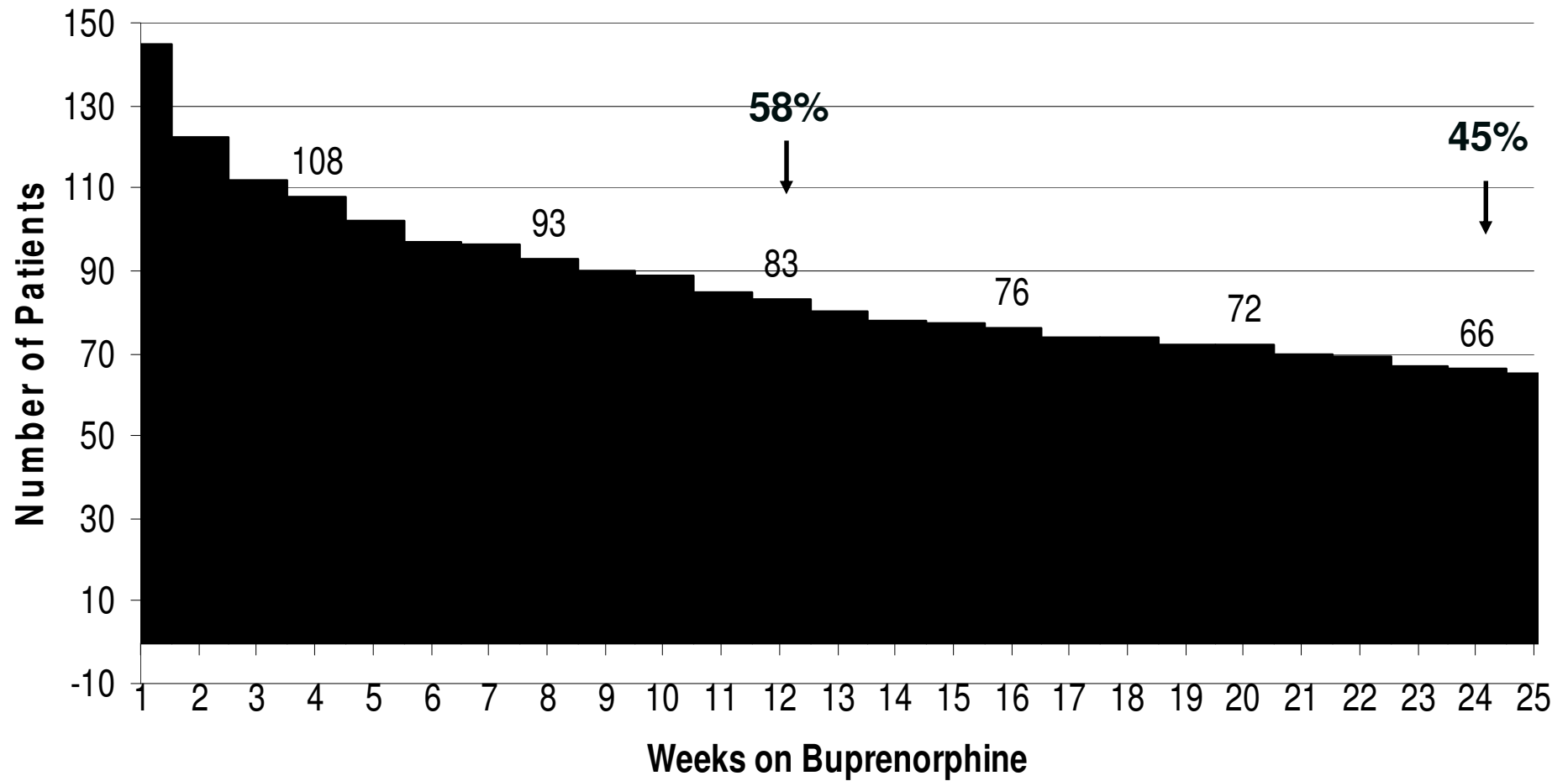
	Screened	Eligible	Enroll	Start Bupe	P Value
Yr. exposed	24	25	25	25	
ALT	46	53	55	54	<0.001*
% Cocaine	47.5	50.6	48.6	50.0	NS
% Methamp	15.6	14.9	13.5	13.2	NS
% Alcohol	58.0	50.3	60.1	55.5	NS

\*Significant for the difference between screened and eligible cohorts

# Drug Use Week 0-12

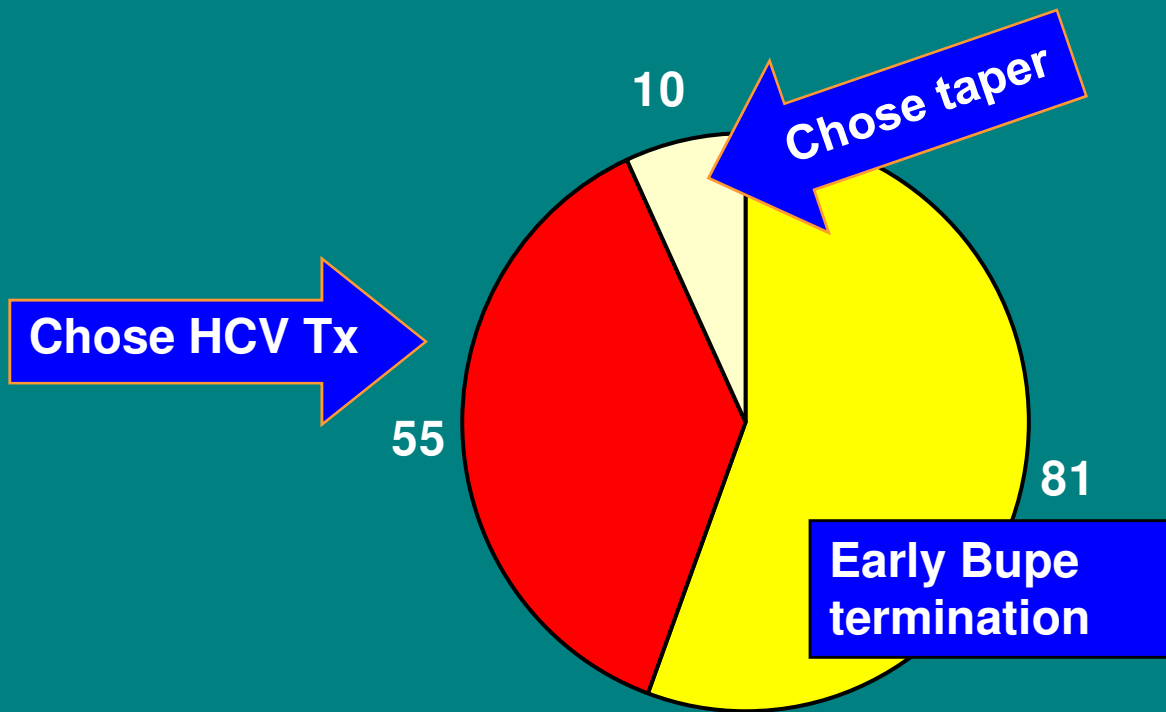


# Treatment Retention (n=146)



# **Interest in HCV Treatment**

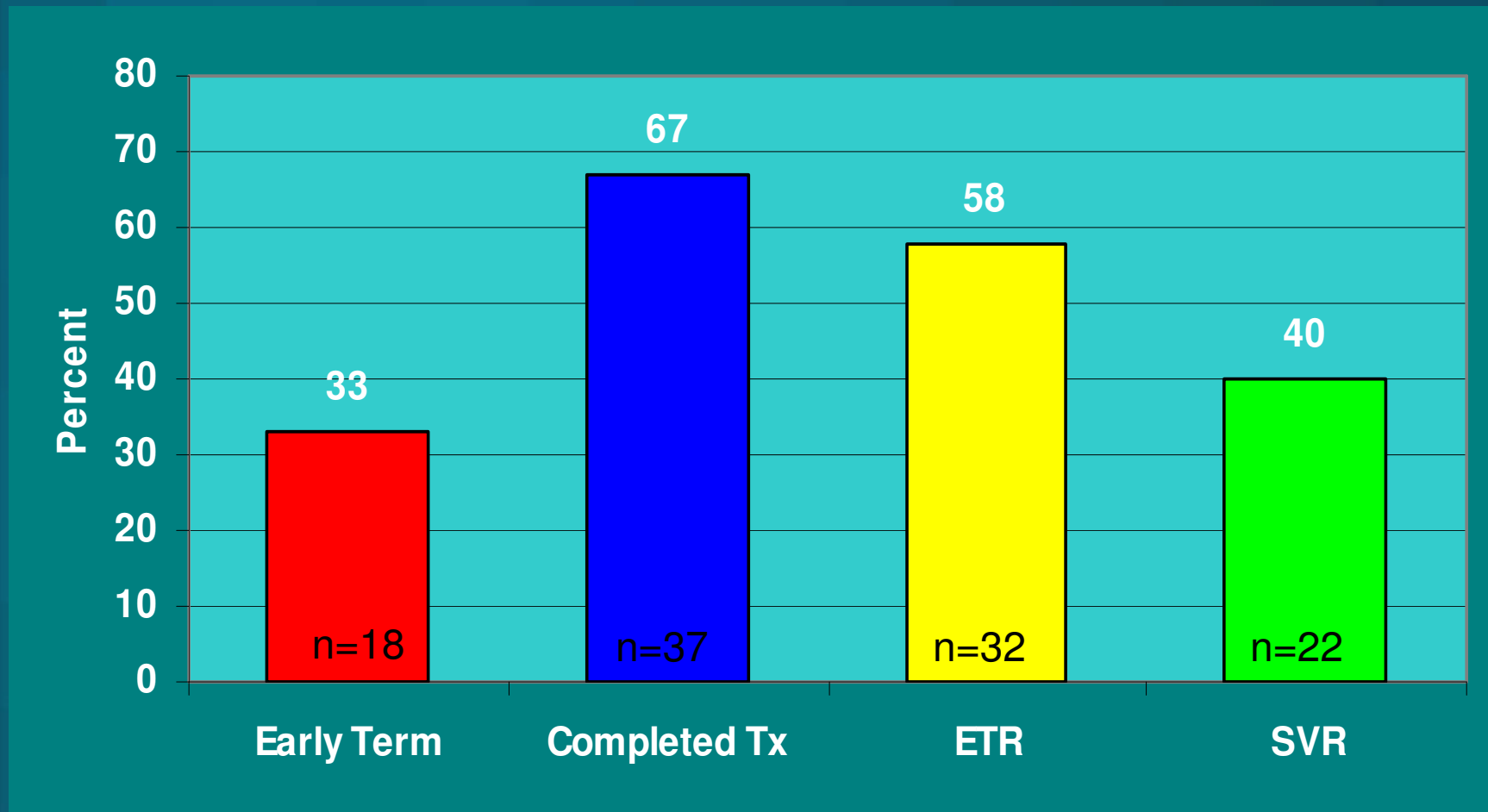
# Interest in HCV Treatment



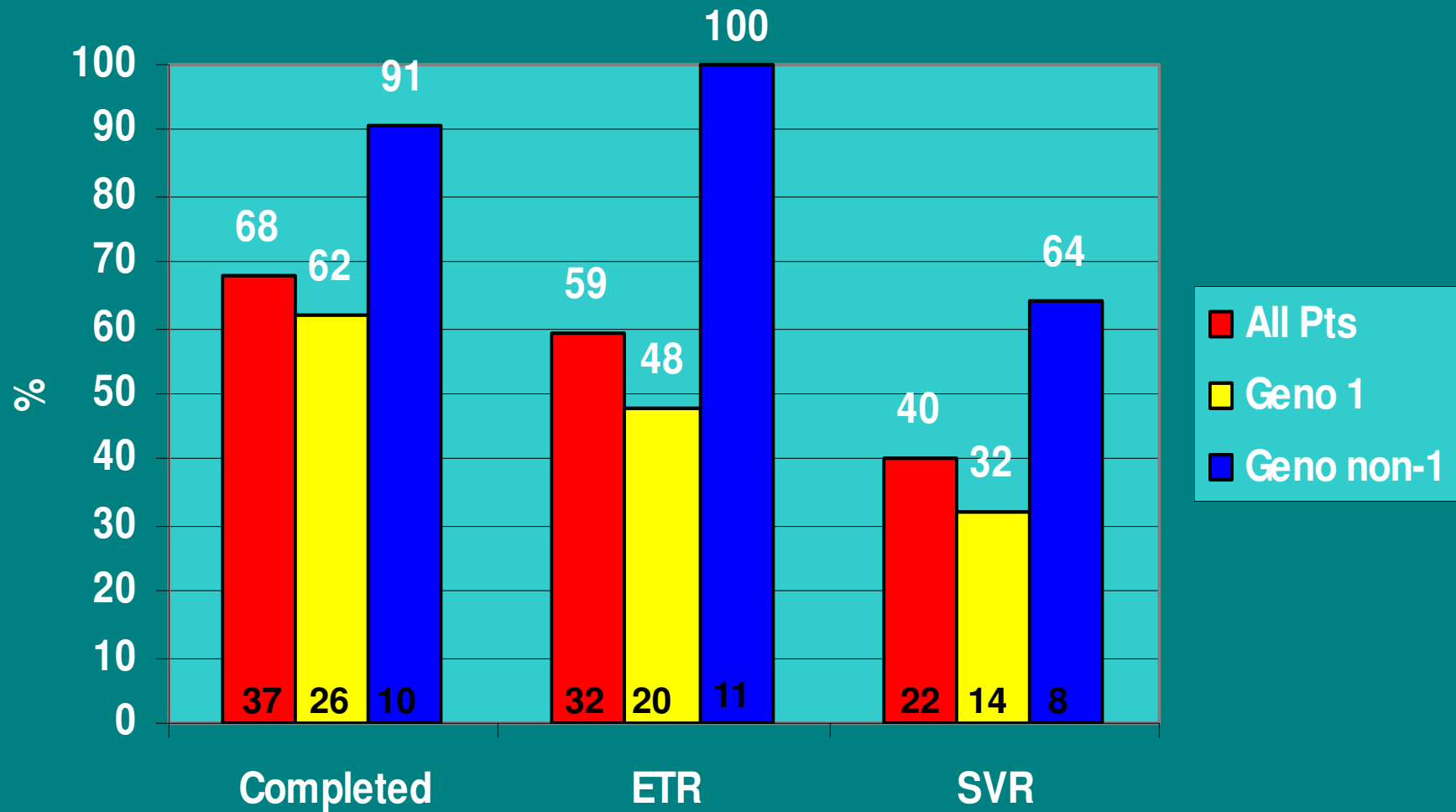
# HCV Treatment Outcomes

- Completed treatment, n=37
- Early termination, n=18
  - 3 incarcerated
  - 4 medical
  - 10 failed to show
  - 1 side effects

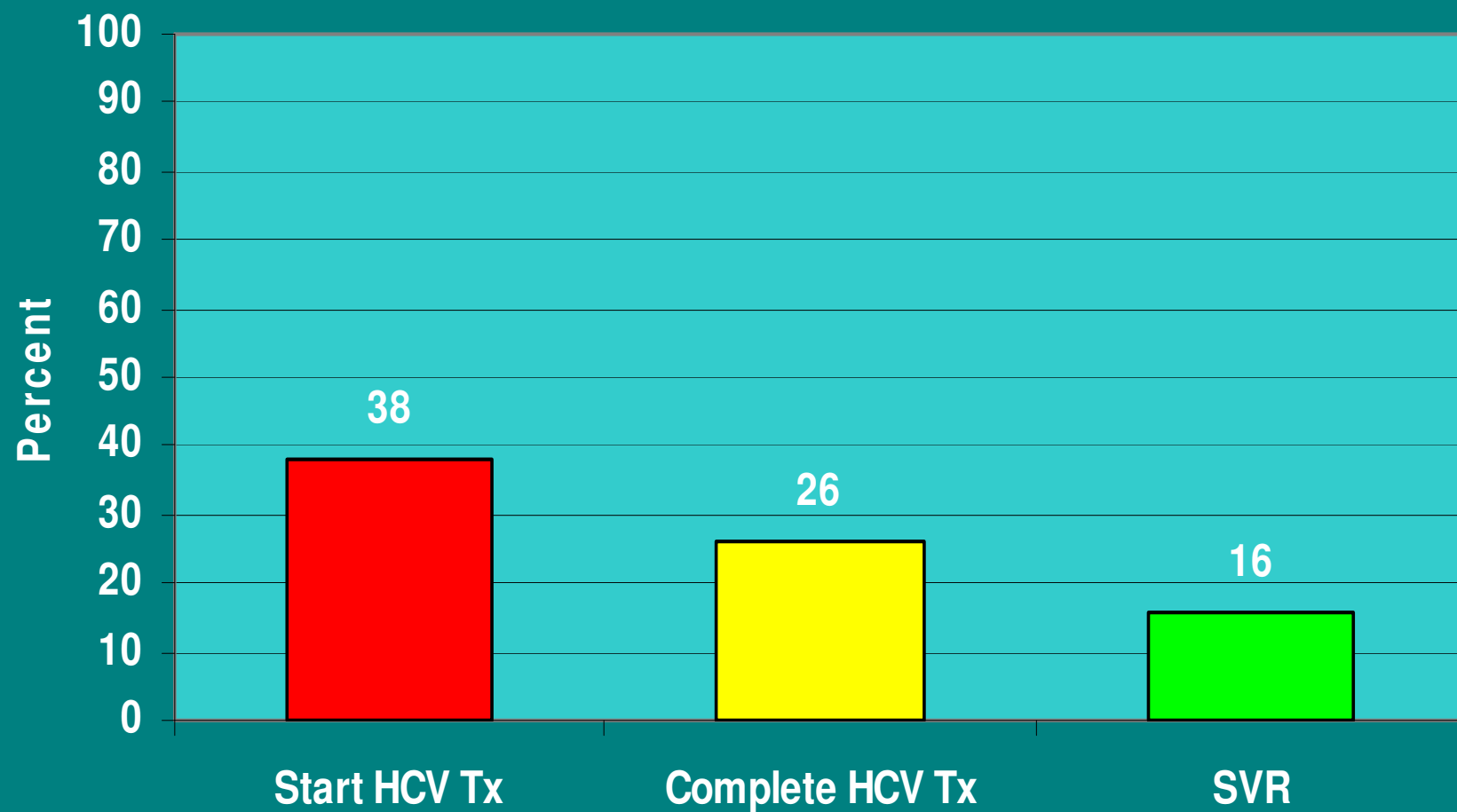
# HCV Treatment Outcomes



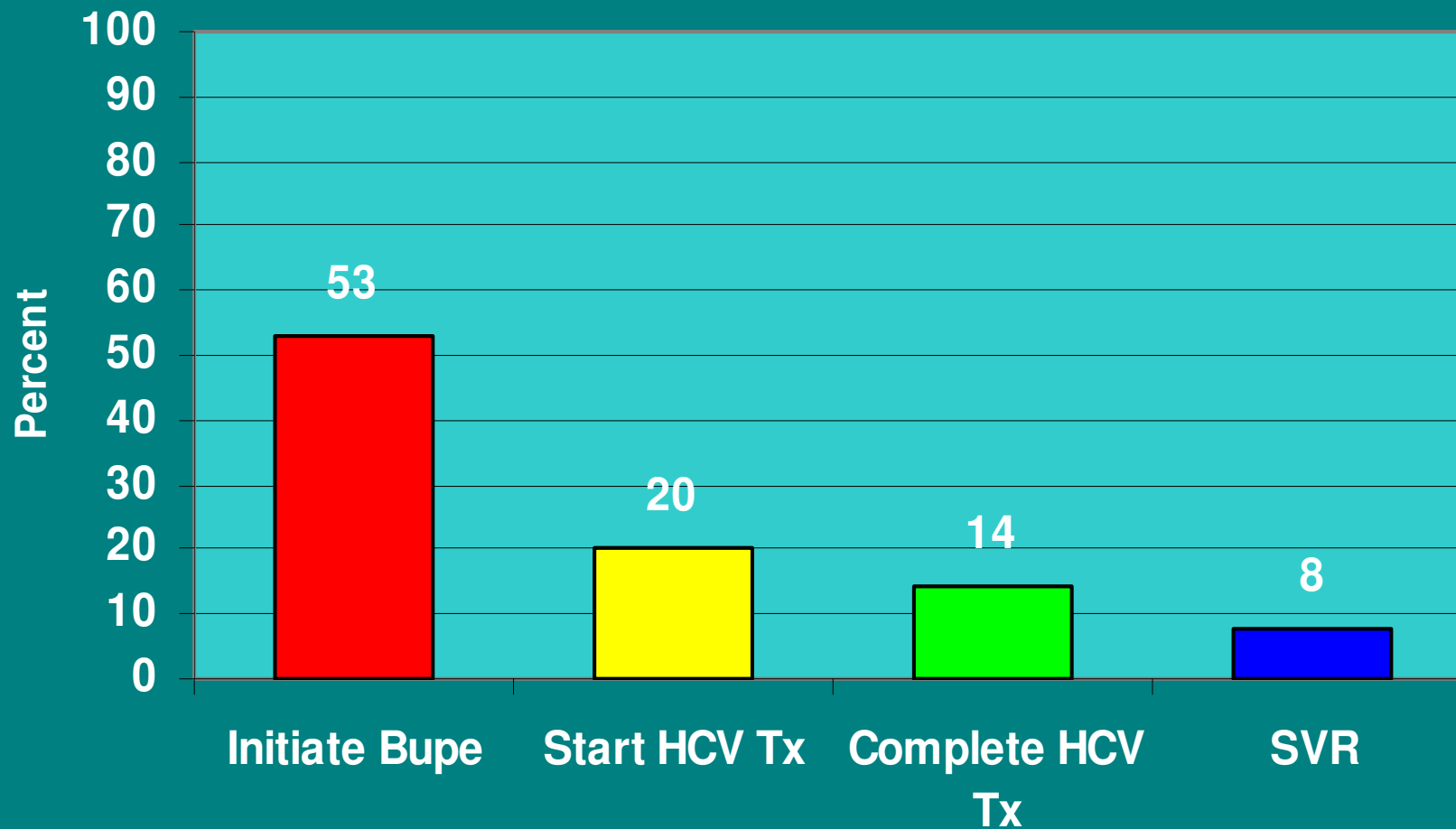
# Outcomes by Genotype



# Relevance to heroin users who initiate buprenorphine



# Relevance to all eligible heroin users

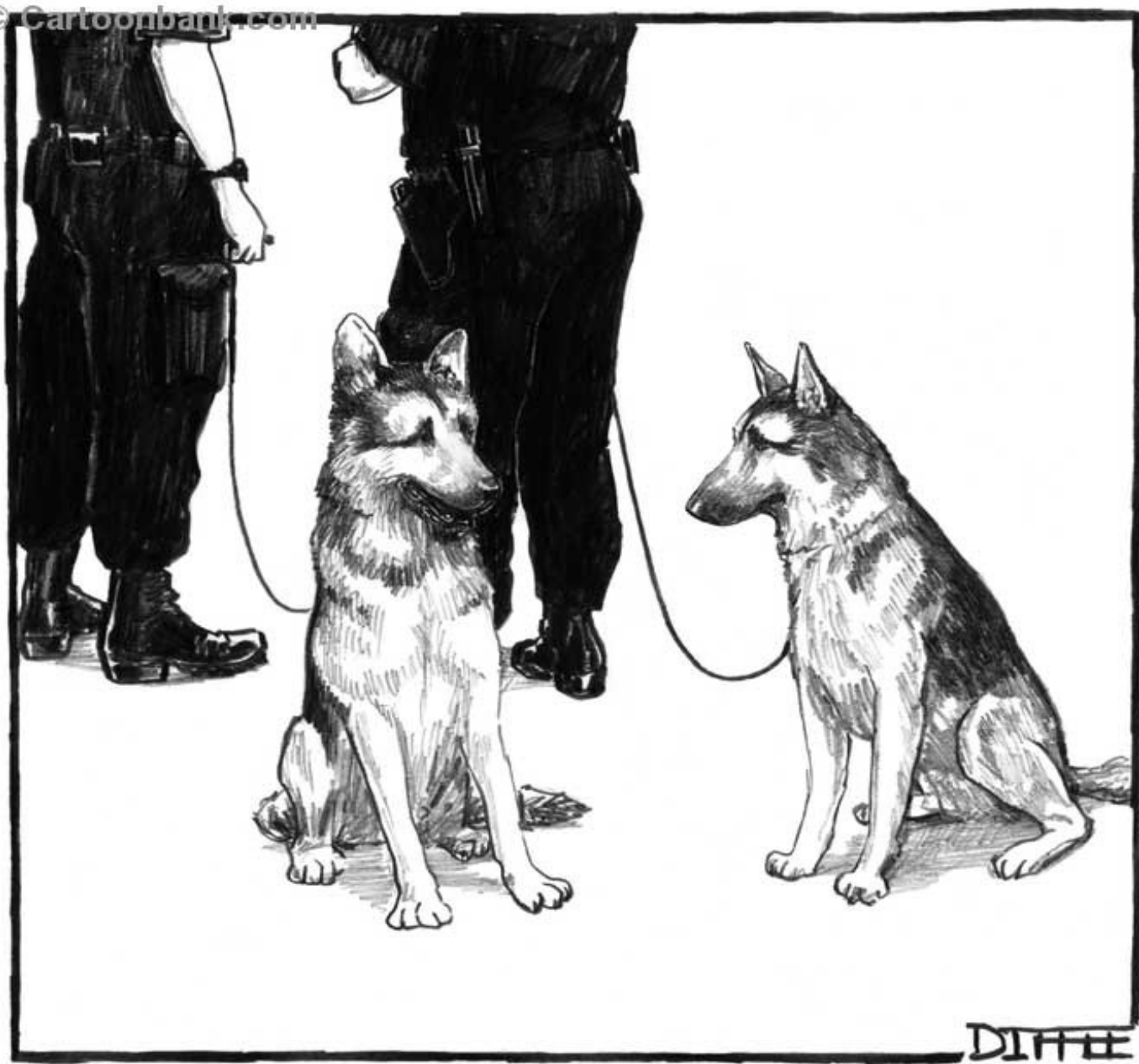


# Current Questions

- Can we predict who will successfully complete HCV treatment?
- Can we predict who will initiate HCV treatment?
- How can we maximize engagement and outcomes?

# Acknowledgments

- NIDA
- OASIS Staff
  - Christopher McNeil
  - Laphyne Barrett
- East Bay Community Recovery Project



*"I'm starting to really like the smell of cocaine."*