

RADARS[®]
S Y S T E M **2019**

13TH ANNUAL SCIENTIFIC MEETING

Lessons from Opana[®] ER: Policy, Behavior, and Reality

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Roadmap

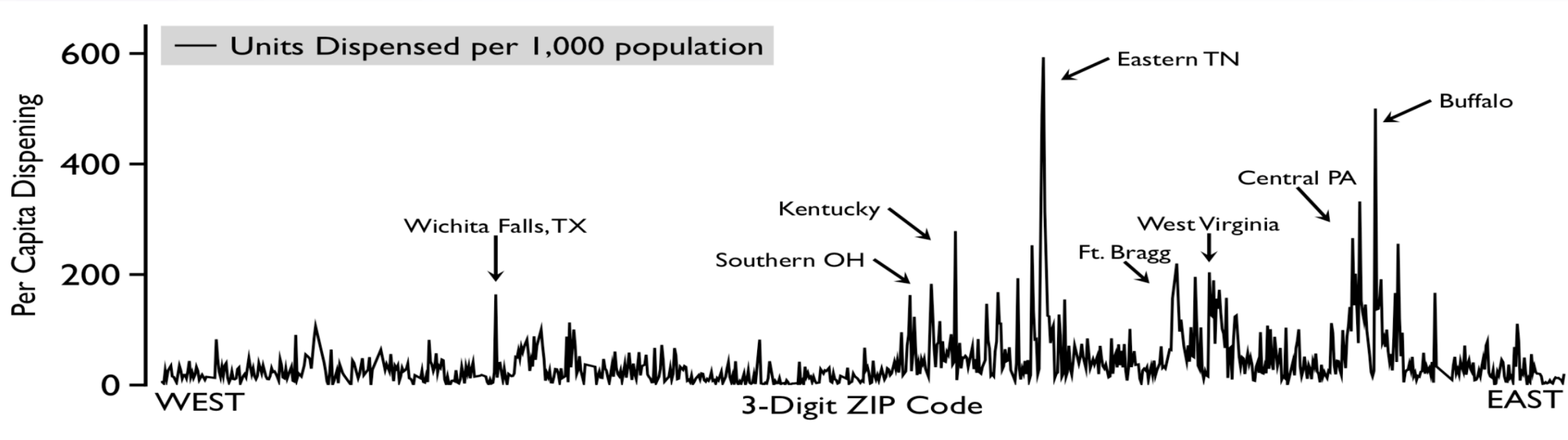
- Opana ER and its complicated history
- Policy changes and interventions
- Effects of policy on behavior and trends
- Lessons learned

Opana ER

- Extended-release oxymorphone
- Oxymorphone developed in Germany 1914
- Patented 1955
- Opana ER formulation Initially approved in 2006
- Indications: moderate to severe pain requiring around-the-clock treatment
- Geographic distribution



Opana ER: Geographic distribution and heterogeneity



Time: 2009q3 – 2016q4

Source: IQVIA

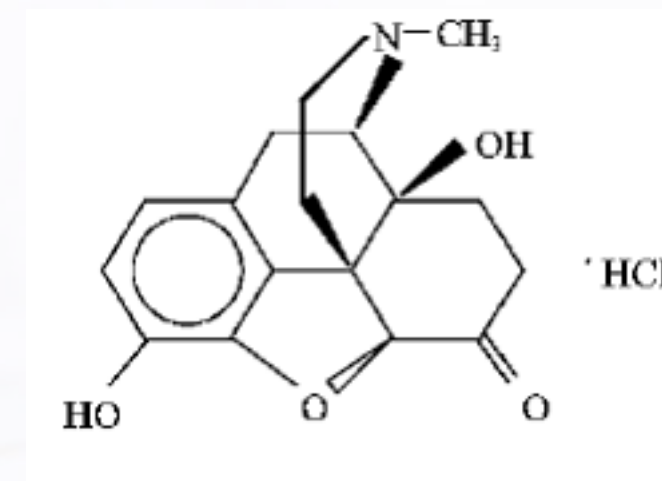
N: 360,432,541 units dispensed

Analysis unit: 3-digit ZIP

Metric: cumulative population-adjusted rate

Oxymorphone

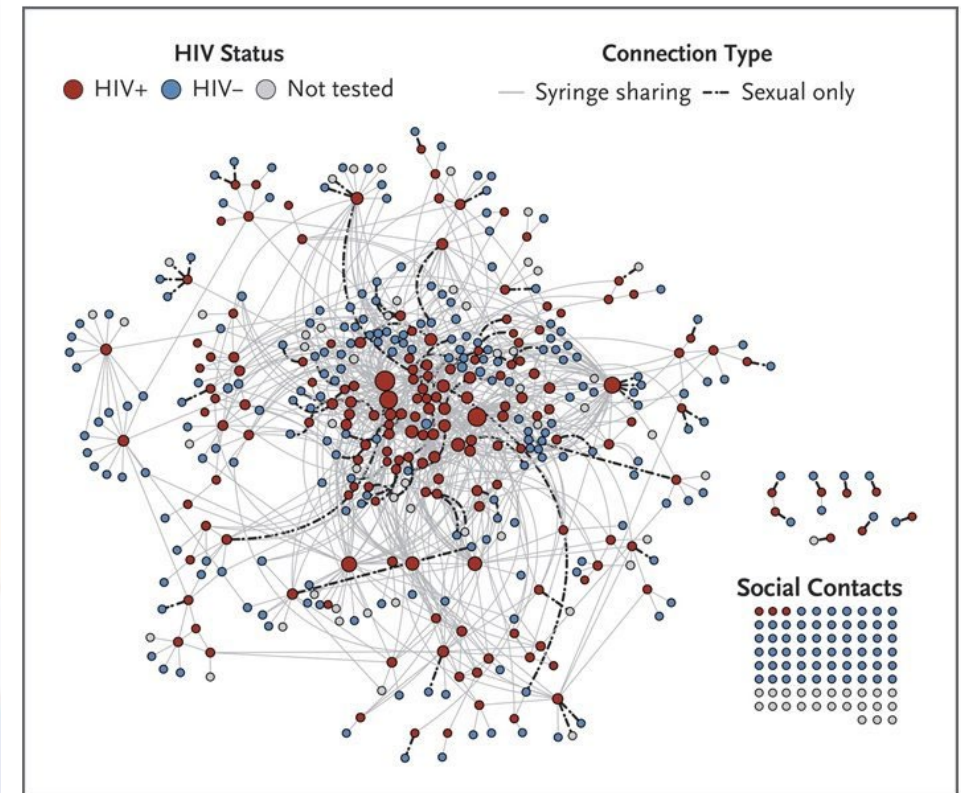
- Poor oral bioavailability
 - 10x more potent intravenously than orally
- Leads to unusual behaviors
 - Single 40mg pill = split into quarters
 - Each quarter = 2-4 users
 - Single pill leads to 8-16 doses intravenously
 - Each dose 50-75 MME



Oxymorphone

- Poor oral bioavailability
 - 10x more potent intravenously than orally
- Leads to unusual behaviors
 - Drug sharing
 - Unsafe injection practices
- Complications
 - HIV
 - Hepatitis C
 - TTP

Syringe-Sharing Network of Persons with Newly Diagnosed HIV Infection.



Opana ER: Interventions and Policy Changes

- 2011: Reformulation approved
 - Released in 2012
 - Tamper resistant, but did not achieve ADF labeling
- Concern for transition from intranasal to intravenous abuse
- Outbreaks associated with oxymorphone

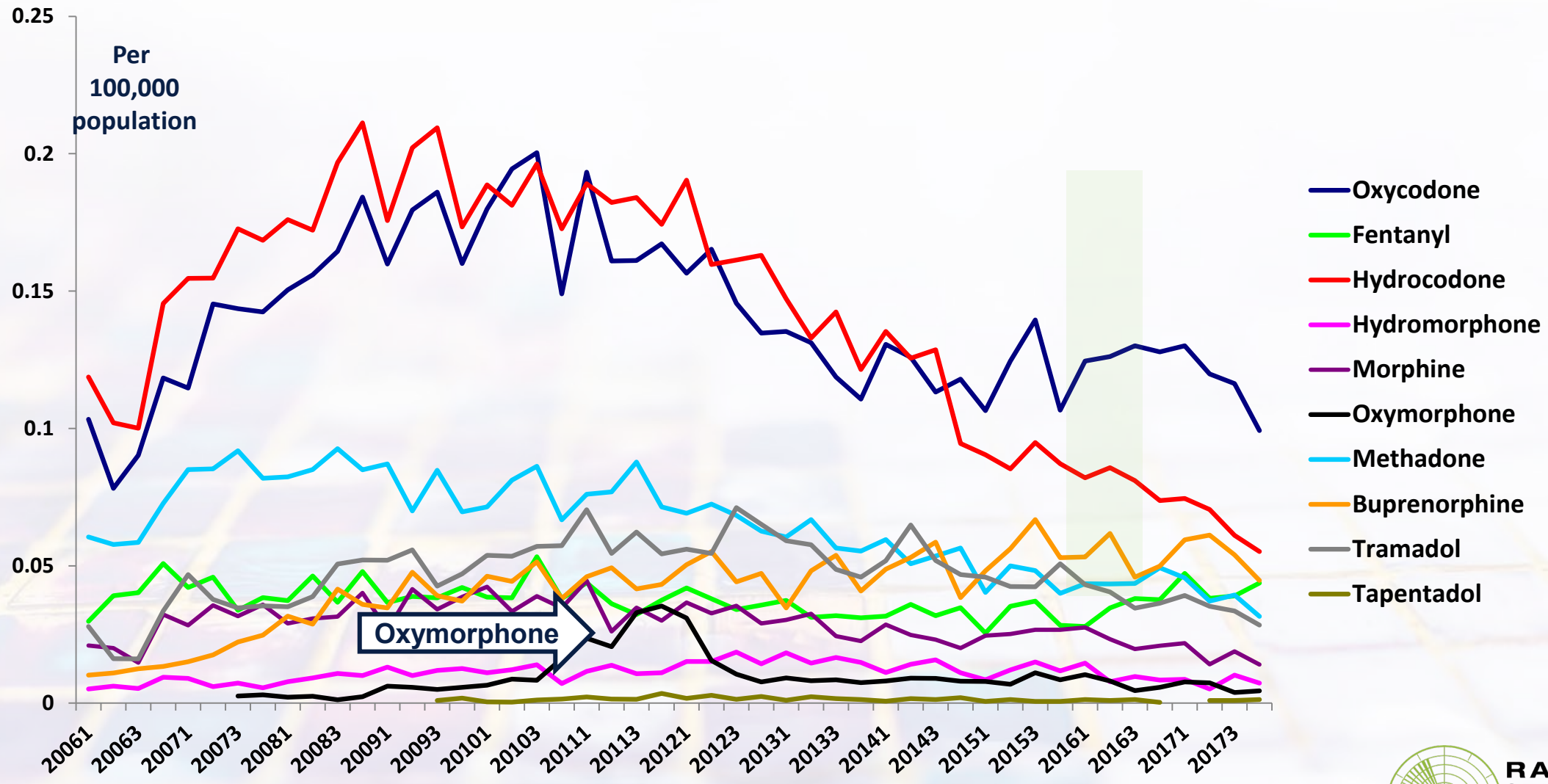


Opana ER: Interventions and Policy Changes

- March 2017:
 - FDA meeting
 - 18-8 vote, benefits no longer outweigh risks
- June 2017:
 - Recommended to be removed from market
- July 2017:
 - Opana ER removed
 - No change to generic forms or IR

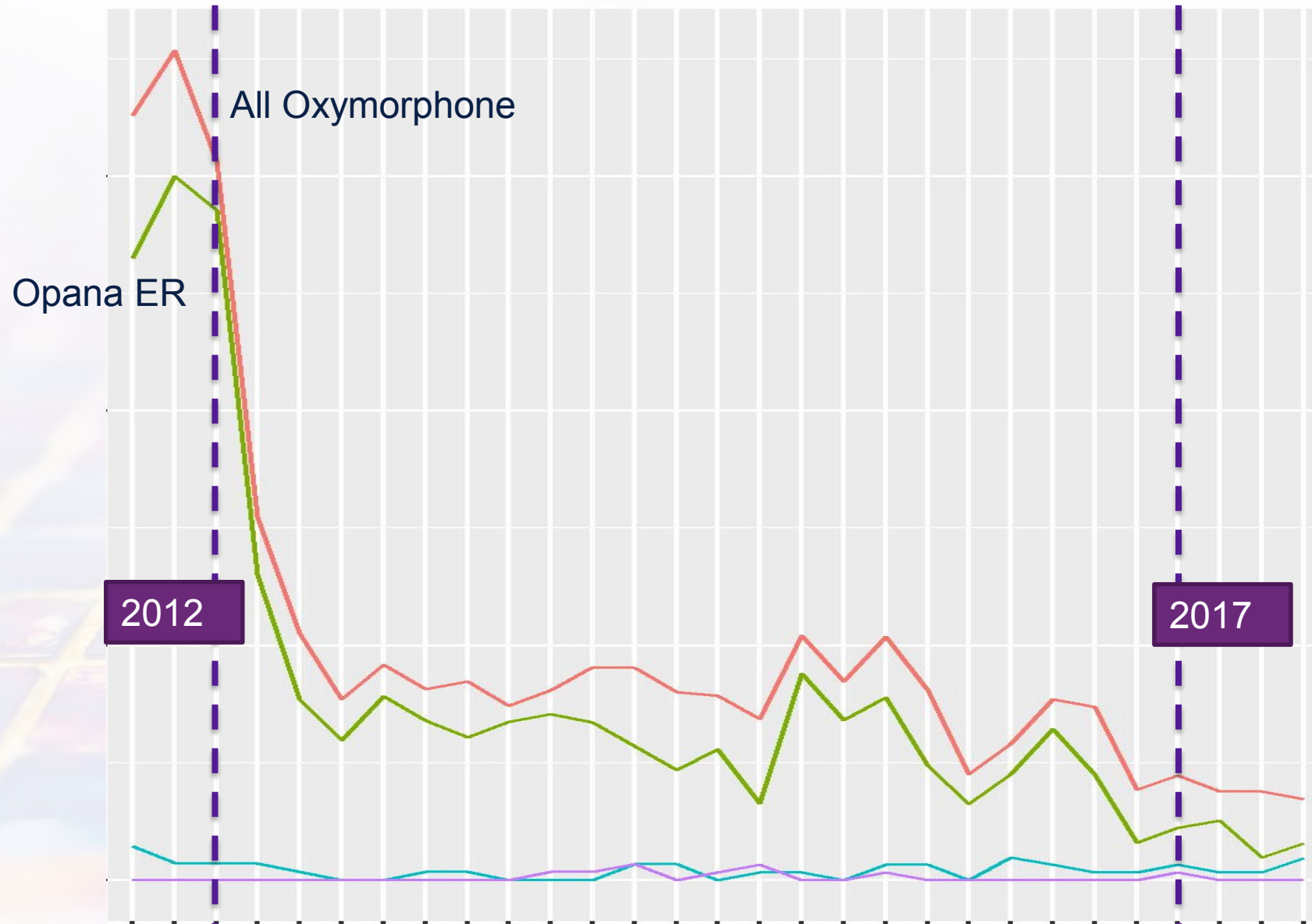


Oxymorphone: Big picture Poison Center Program



Opana ER: Effects of Policy on Behavior and Trends

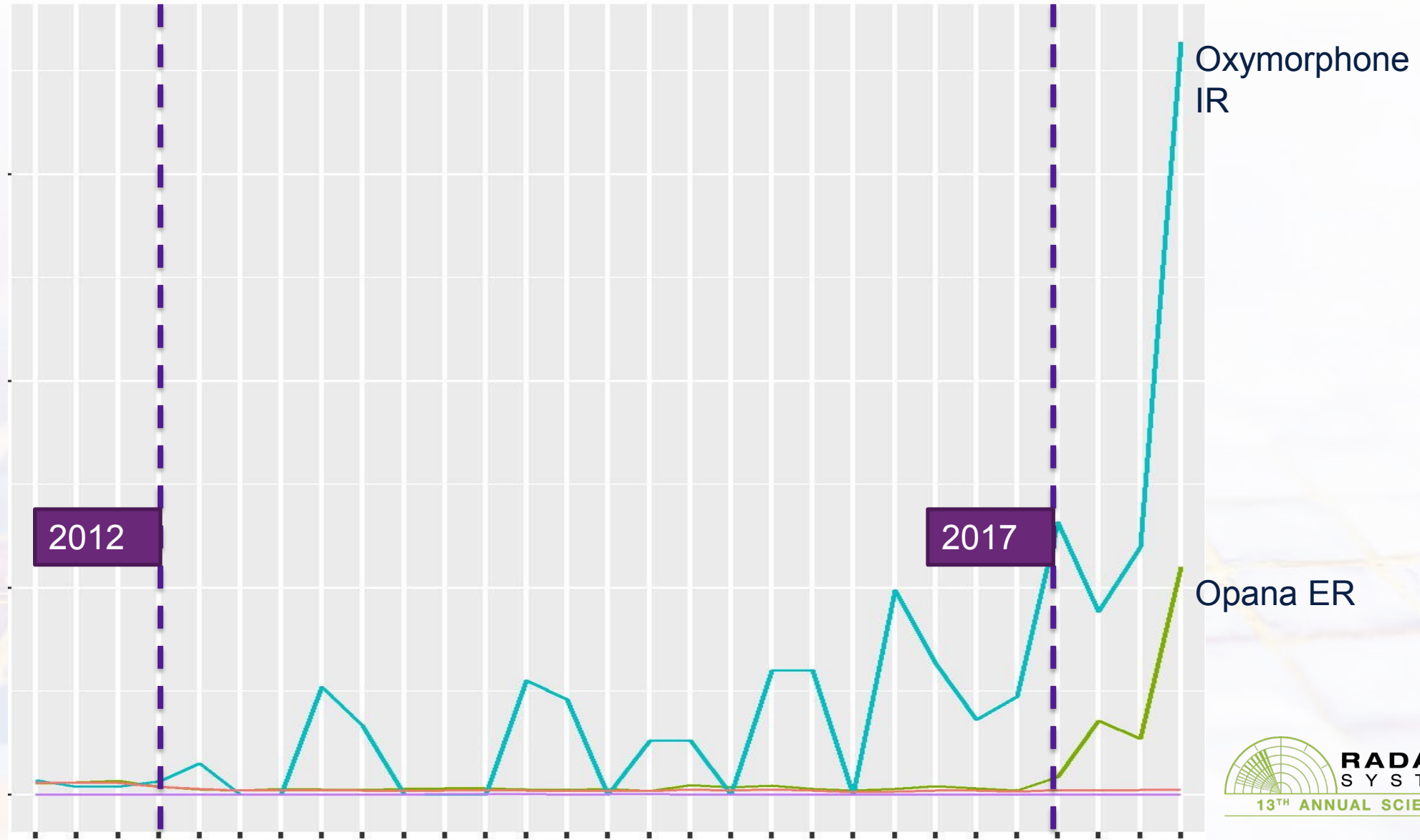
Poison Center Program, rate per population



References: 10 pt.

Opana ER: Effects of Policy on Behavior and Trends

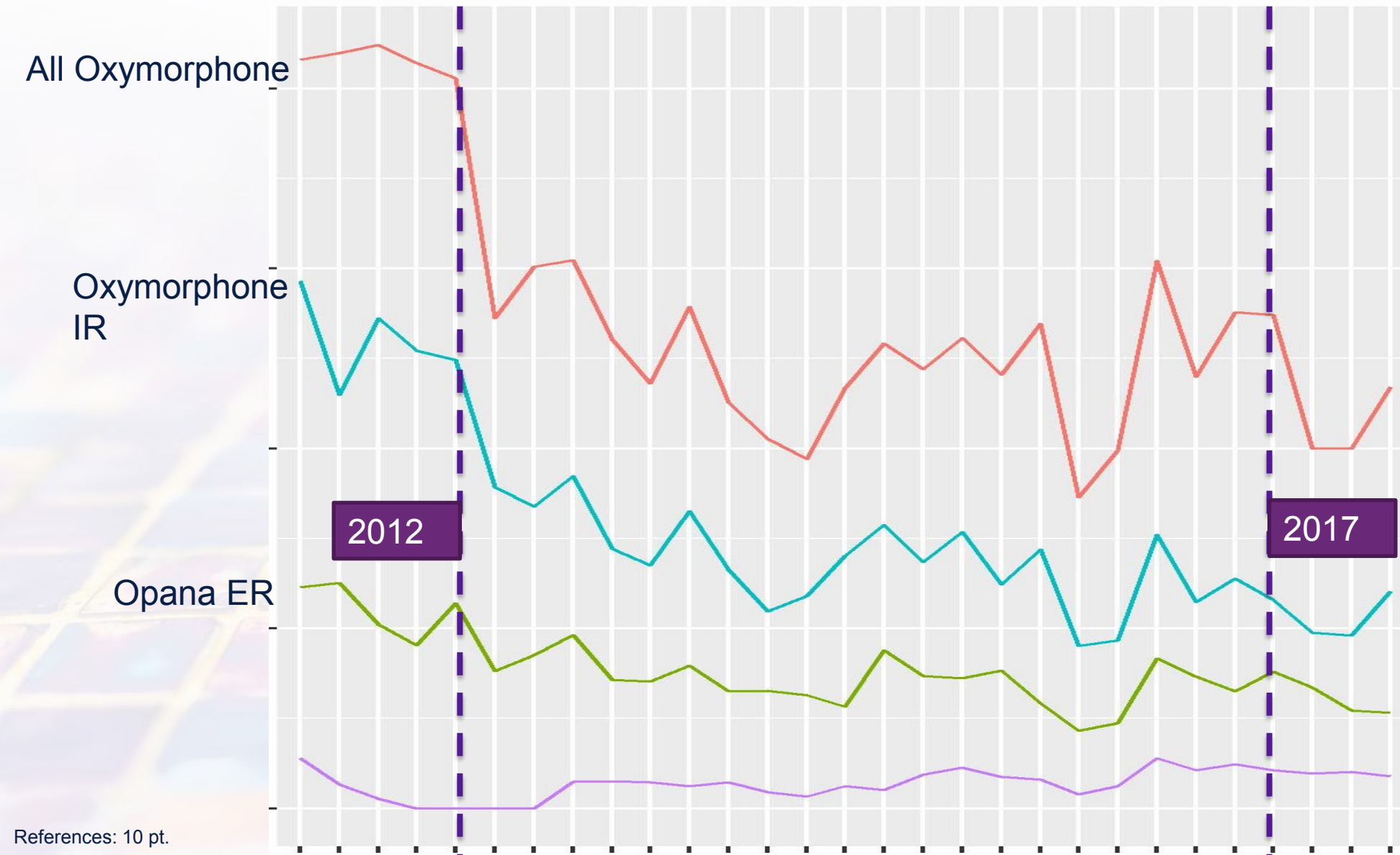
Poison Center Program, rate per prescriptions



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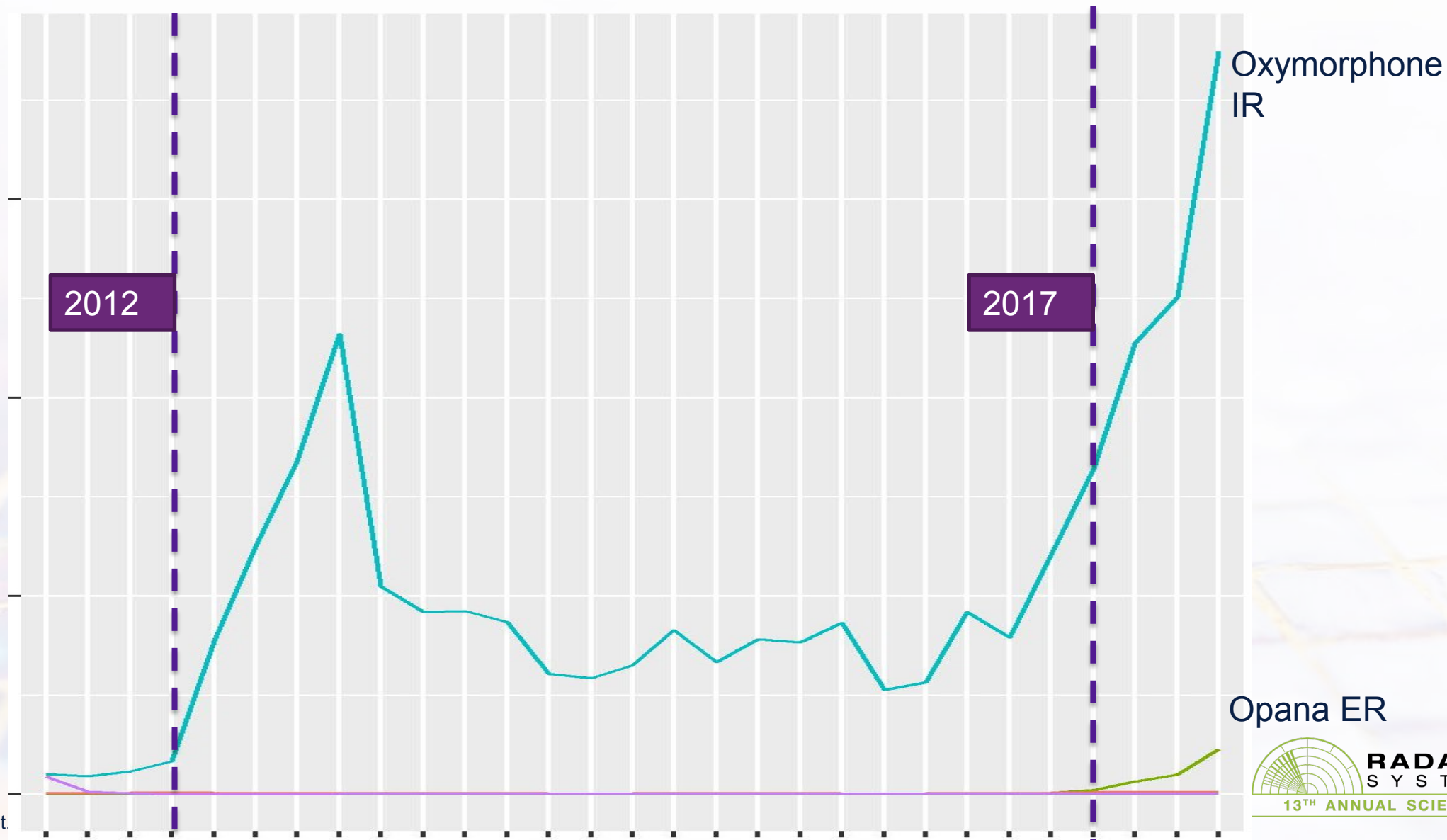
Opana ER: Effects of Policy on Behavior and Trends

Treatment Center Programs, rate per population



Opana ER: Effects of Policy on Behavior and Trends

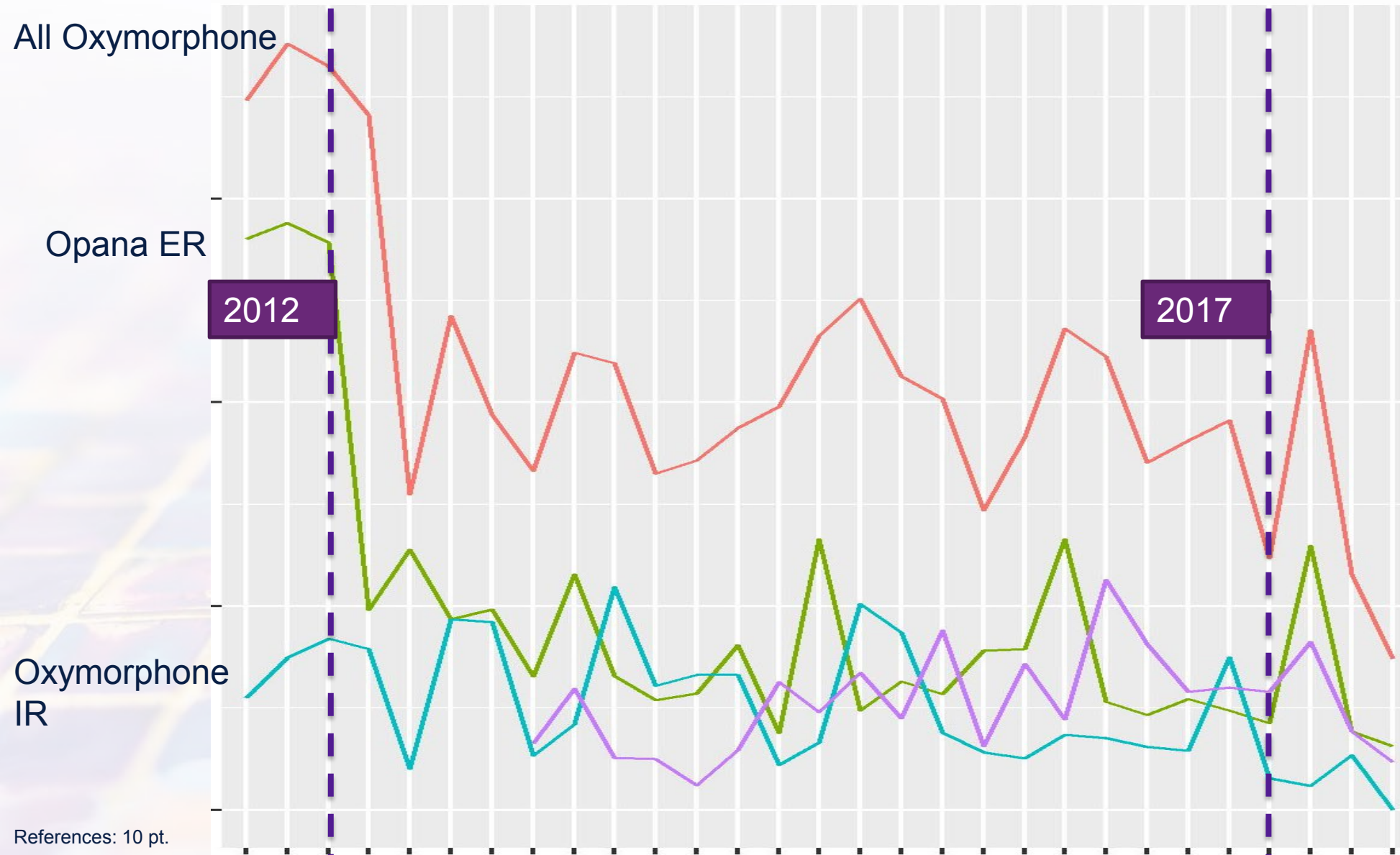
Treatment Center Programs, rate per prescriptions



Opana ER

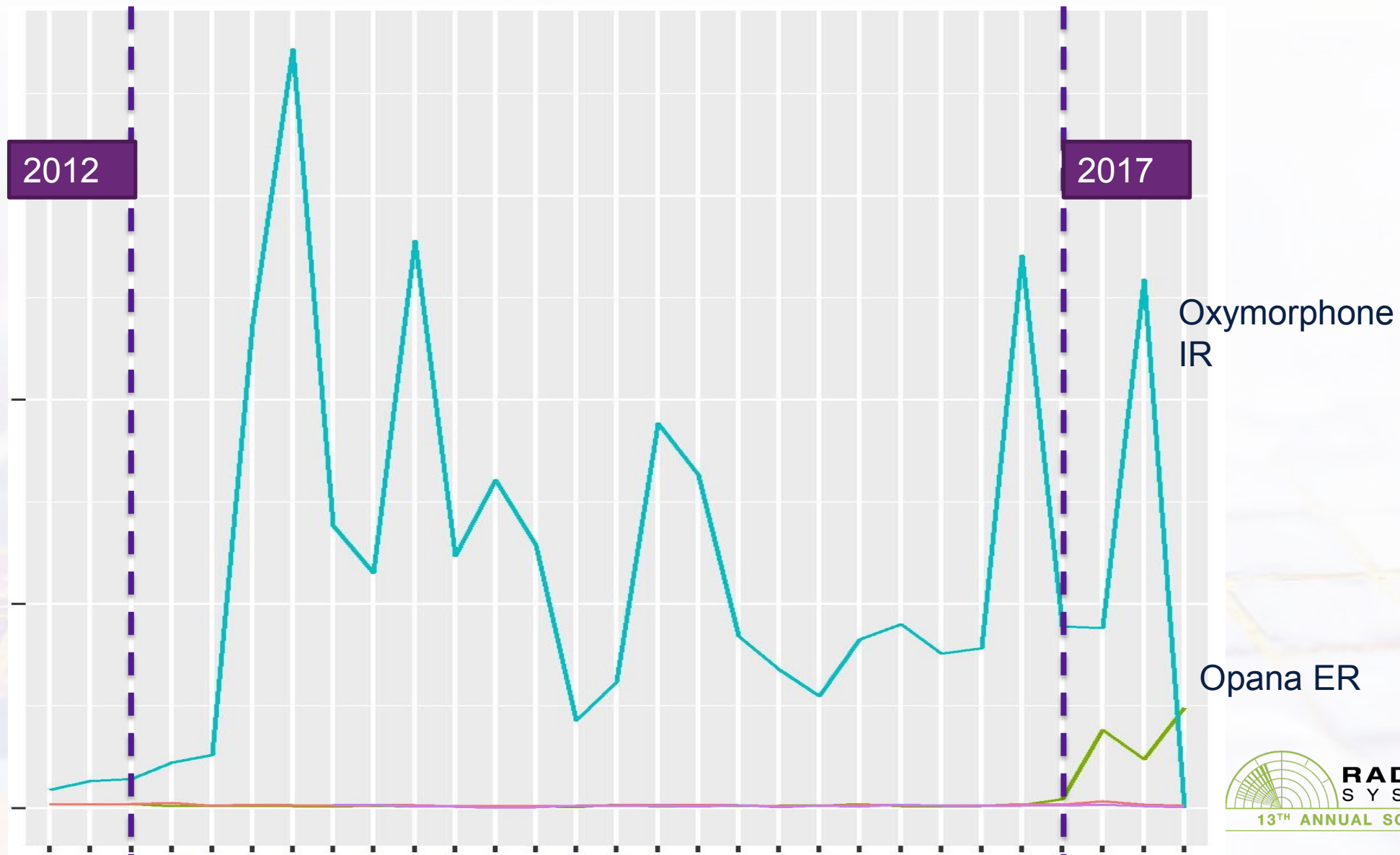
Opana ER: Effects of Policy on Behavior and Trends

Drug Diversion Program, rate per population



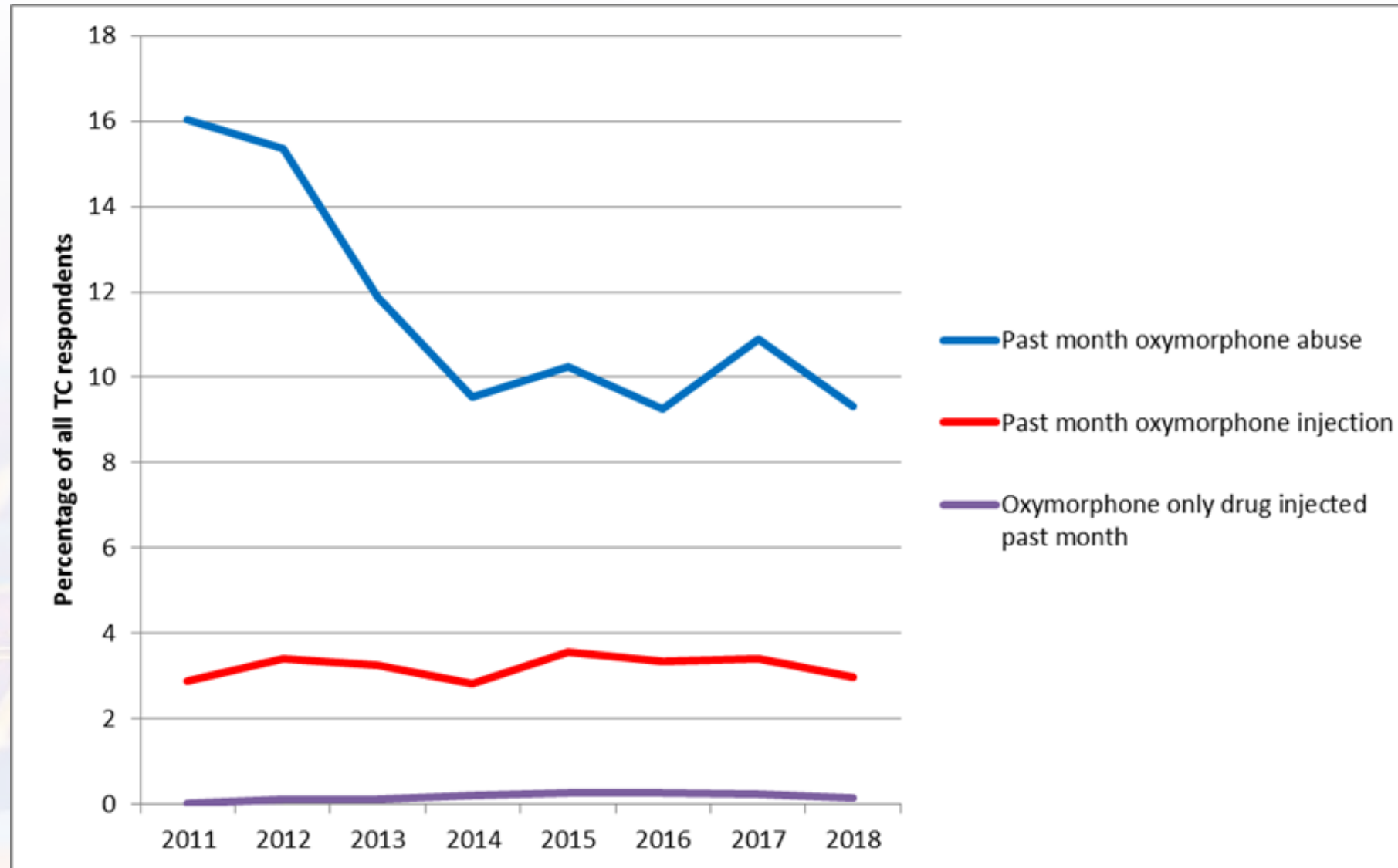
Opana ER: Effects of Policy on Behavior and Trends

Drug Diversion Program, rate per prescriptions



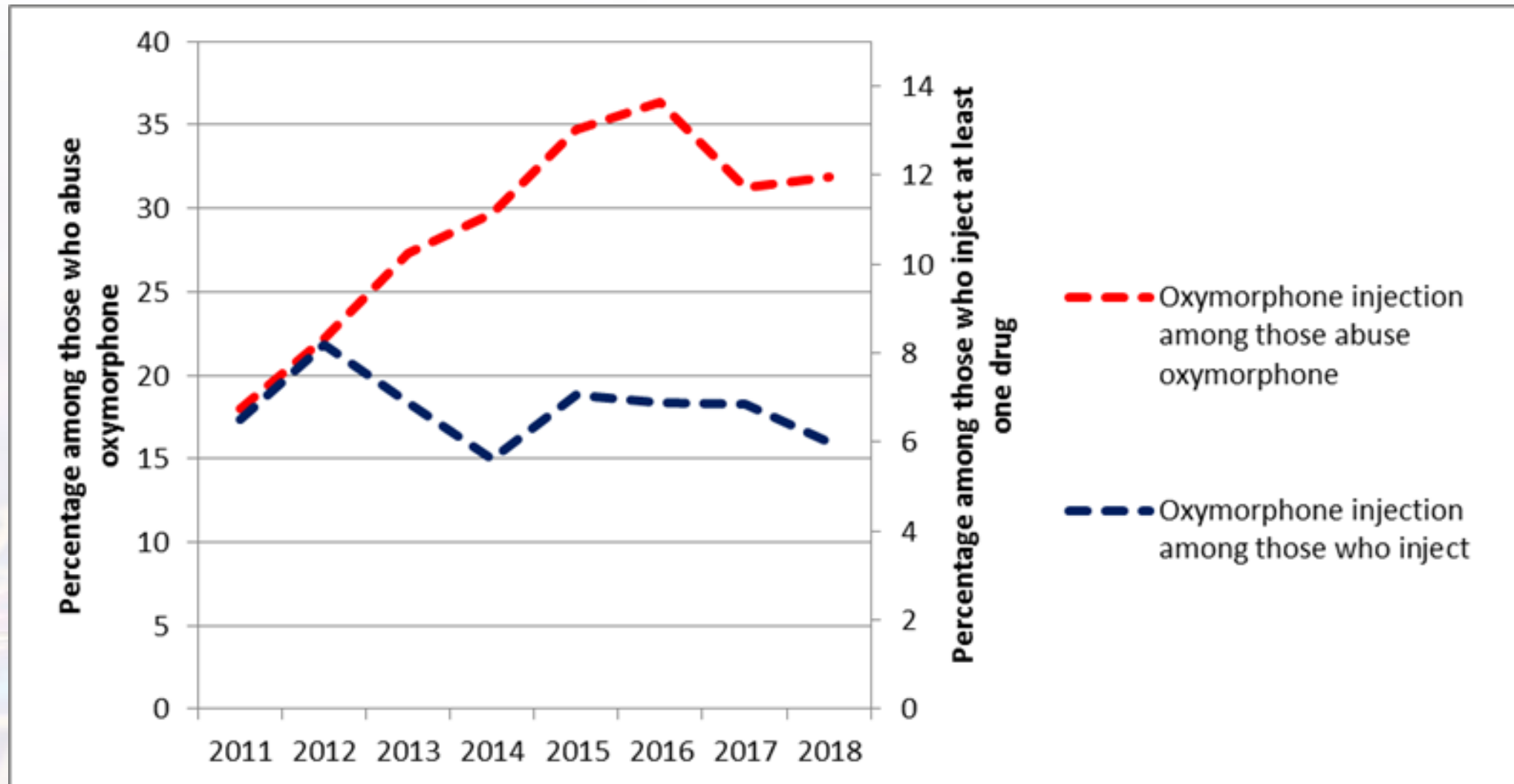
Opana ER: Effects of Policy on Behavior and Trends

Did injection behavior change?



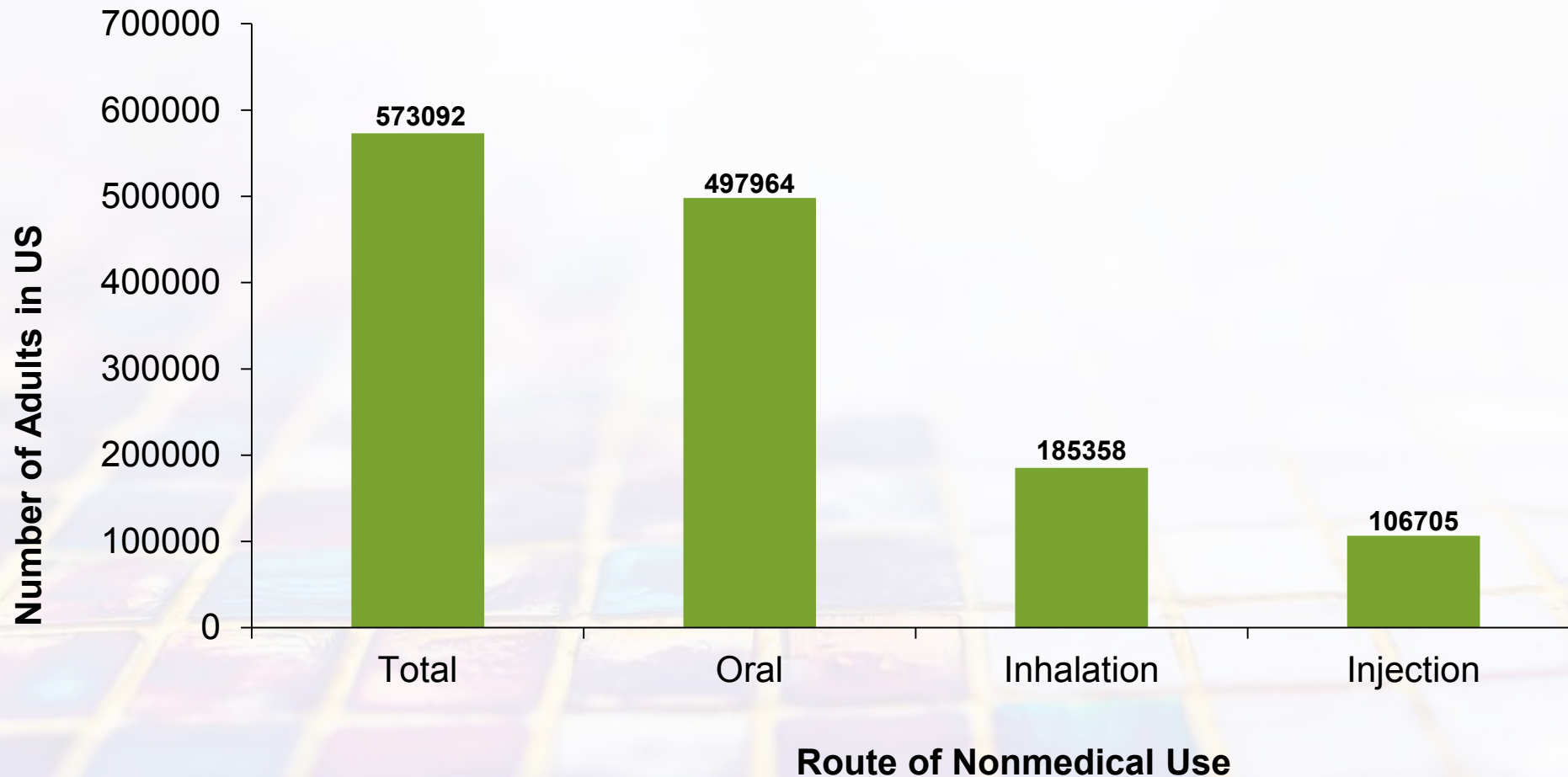
Opana ER: Effects of Policy on Behavior and Trends

Did injection behavior change?



Opana ER: Effects of Policy on Behavior and Trends

Did injection behavior change? NMURx data



Conclusions

- Oxymorphone as a molecule lends itself to dangerous behaviors
 - Low oral bioavailability, high intravenous potency
 - Sharing behaviors are common
- Policy changes and interventions with Opana ER are a good first step
 - BUT do not seem to have impacted injection use as much as desired
- To see a significant impact, would likely need to take a step further
 - Is it worth considering removing all oxymorphone?
- Lessons learned

Questions?

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