Mosaic approach for monitoring Healthy People 2020 objectives:

A substance abuse surveillance system

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Disclosure

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Background

- **Healthy People 2020 Objectives**
  - National 10-year objectives for improving and monitoring the health of all Americans
- **Problem**
  - Rapidly changing drug use environment
  - Lack of repeatable yet flexible data instruments
    - Able to provide timely data
    - Ability to adapt questions on surveys
- **Need for real time surveillance**

https://www.healthypeople.gov/

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HP 2020: Substance Abuse Objectives

- **SA 7: Increase the number of admissions to substance abuse treatment for injection drug use**
  - Goal of a 10% improvement

- **SA 13.3: Reduce the proportion of adults reporting use of any illicit drug in the past-month**
  - Goal of a 10% reduction
  - Disparities of interest: age, race/ethnicity

- **SA 19: Reduce the past-year non-medical use of prescription drugs**
  - Disparities of interest: age, race/ethnicity, veteran status

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Study Objective

- **Provide progress on three indicators using two RADARS® System Data Sources**
  - Treatment Center Programs Combined
  - Survey of Non-Medical Use of Prescription Drugs Program

- **Demonstrate how these data sources can be used to monitor these indicators**

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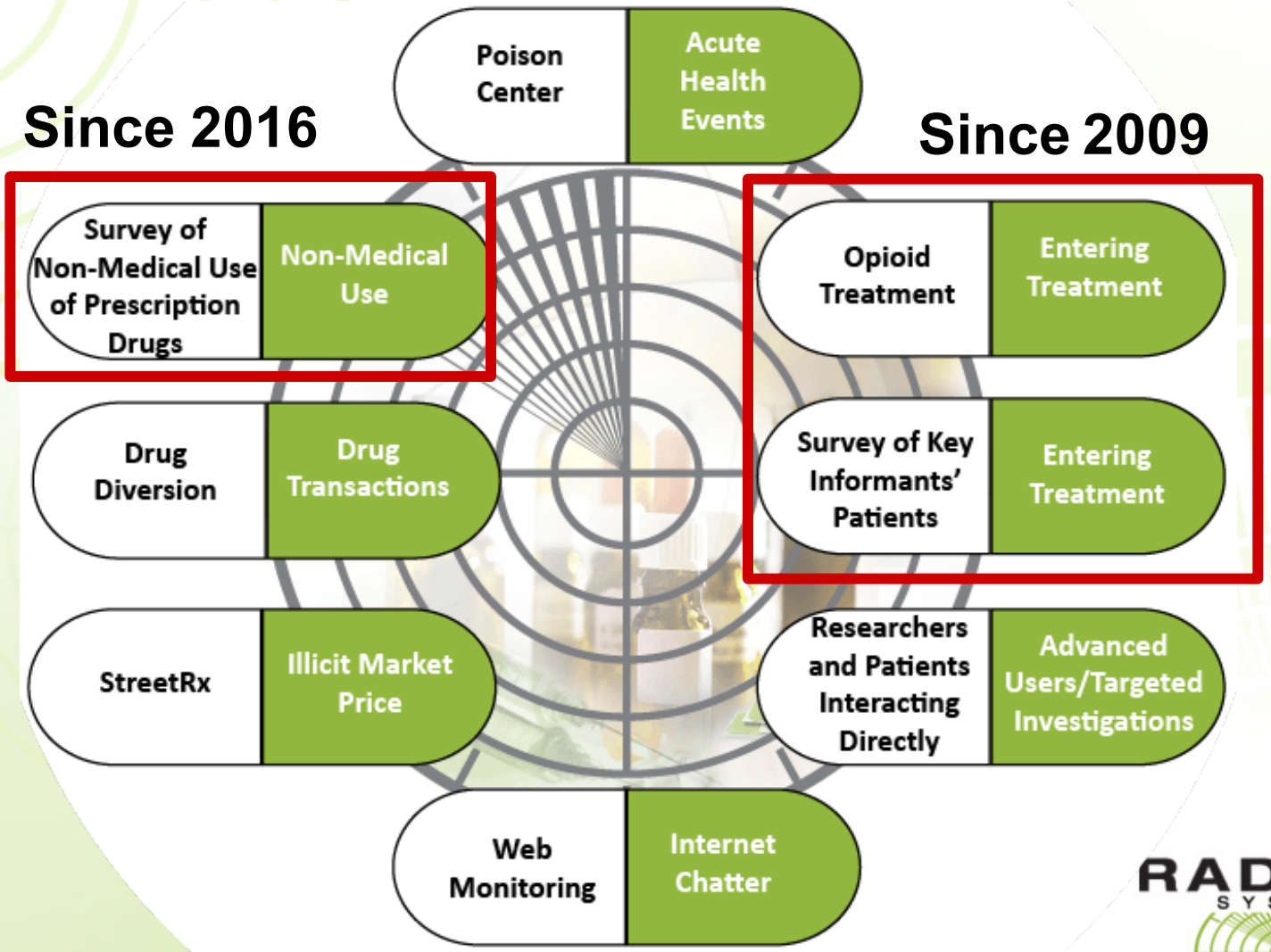
RADARS® Surveillance System: Mosaic Approach



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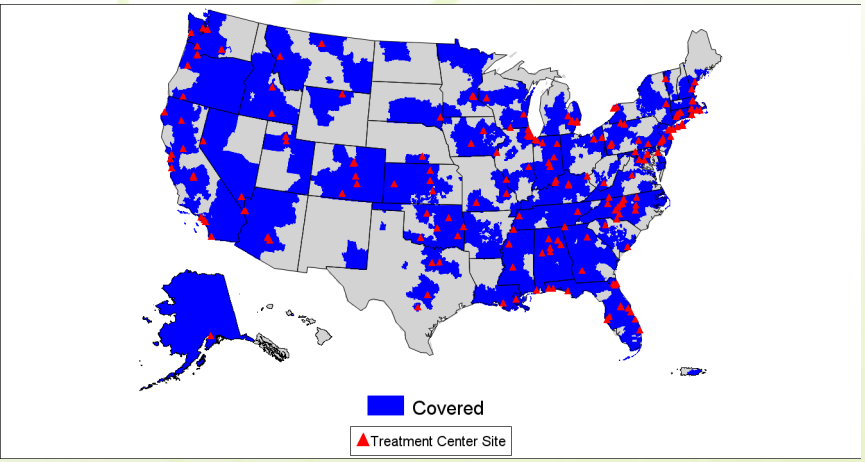
Treatment Center Programs Combined:
Data Collection Methods

- **Overall Design**
  - Newly admitted patients seeking treatment for opioid use disorder
  - Two data collection systems combined with a standardized self-administered questionnaire



Opioid Treatment Program

–Persons entering federally-approved medication-assisted programs

–71 active programs in 33 states

Survey of Key Informants' Patients Program

–Persons entering primarily private treatment centers

–125 Key Informants in 45 states

- **Definition/Type of Cases**
  - Past month abuse prevalence and injection rate of prescription opioids, heroin, and non-opioid drugs

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Treatment Center Programs Combined:
Analytical Methods

- **Study Period**
  - 2011 through 2017
- **Key Measure**
  - Report of injection of a drug at time of treatment admission
  - Report of use of any illicit drug in the past month (cocaine/crack, methamphetamine [crystal meth], hallucinogens, heroin, or MDMA)

- **Regression**
  - Logistic regression with a random intercept on participating centers used to calculate odds ratio of respondents who report injecting a drug in 2017 compared to 2011
  - Stratified by age and race/ethnicity

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Survey of Non-Medical Use of Prescription Drugs Program: Data Collection Methods

- **Study Design**
  - Semi-annual repeated, cross-sectional online survey
- **Population/Sampling**
  - General population of adults recruited from a survey panel
  - Quota sampling proportional to census region and 50:50 male/female

- **Sample size**
  - 63,042 adults in 2017
- **Definition/Type of Cases**
  - Non-medical: use of a medication without a doctor's prescription or for any reason other than what was recommended by a doctor
    - Opioids indicated for pain
  - Illicit drug use in past month

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Survey of Non-Medical Use of Prescription Drugs Program: Analytical Methods

- **Post-stratification Weighting**
  - Weights are applied to reflect distribution of adults in the US
    - Census region – NE, MW, S, W
    - Gender
    - Age categories – 10 year categories

- **Prevalence Estimates**
  - National estimates and 95% Confidence Intervals (CI)
  - Stratified by age, race/ethnicity, veteran status

- **Population-Based Rates, State Heat Maps**
  - Weighted estimate of the number of adults for each measure per 100,000 adult population

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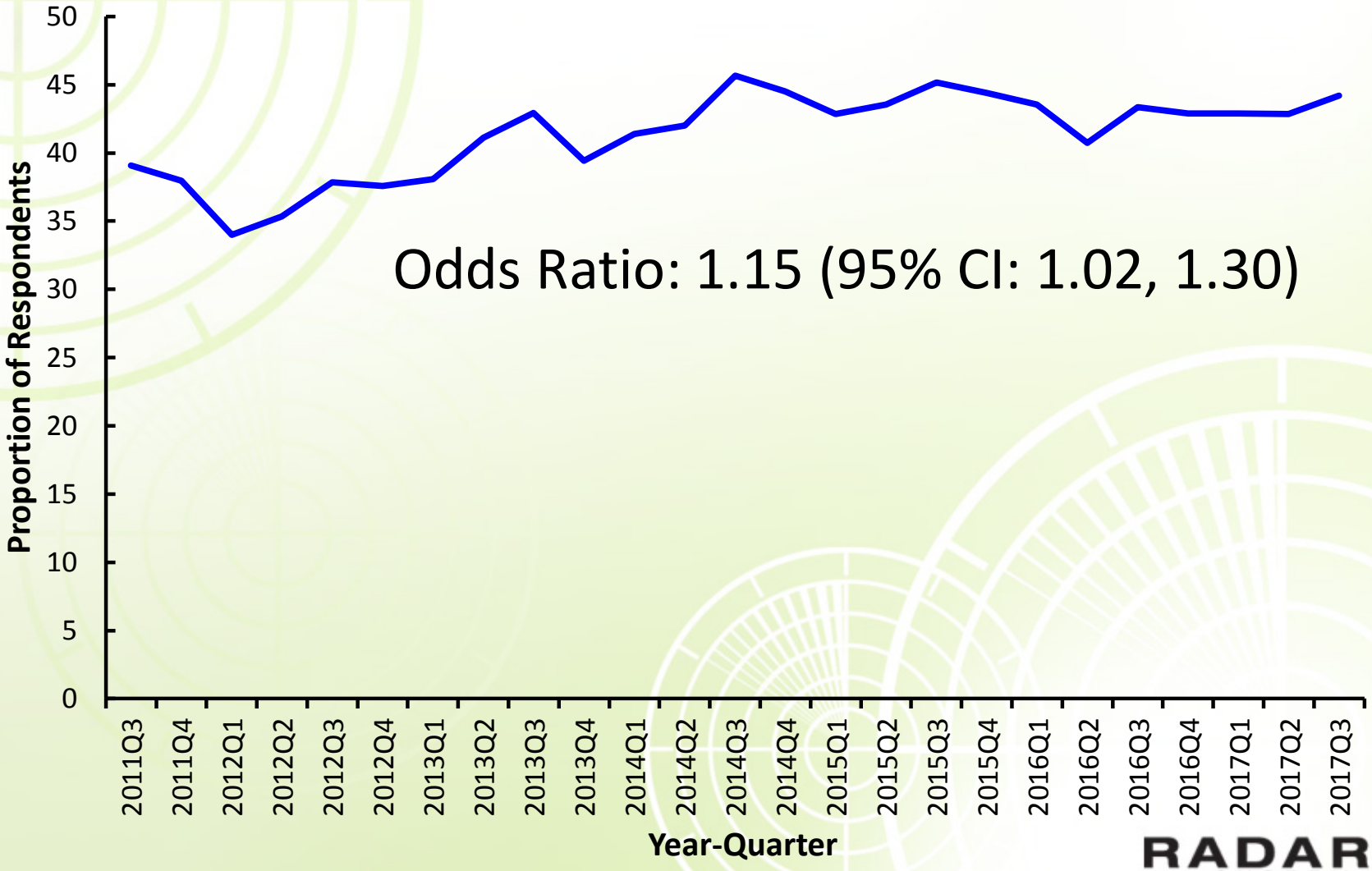
Treatment Center Programs Combined

Injection Drug Use in Past Month



Odds Ratio: 1.15 (95% CI: 1.02, 1.30)

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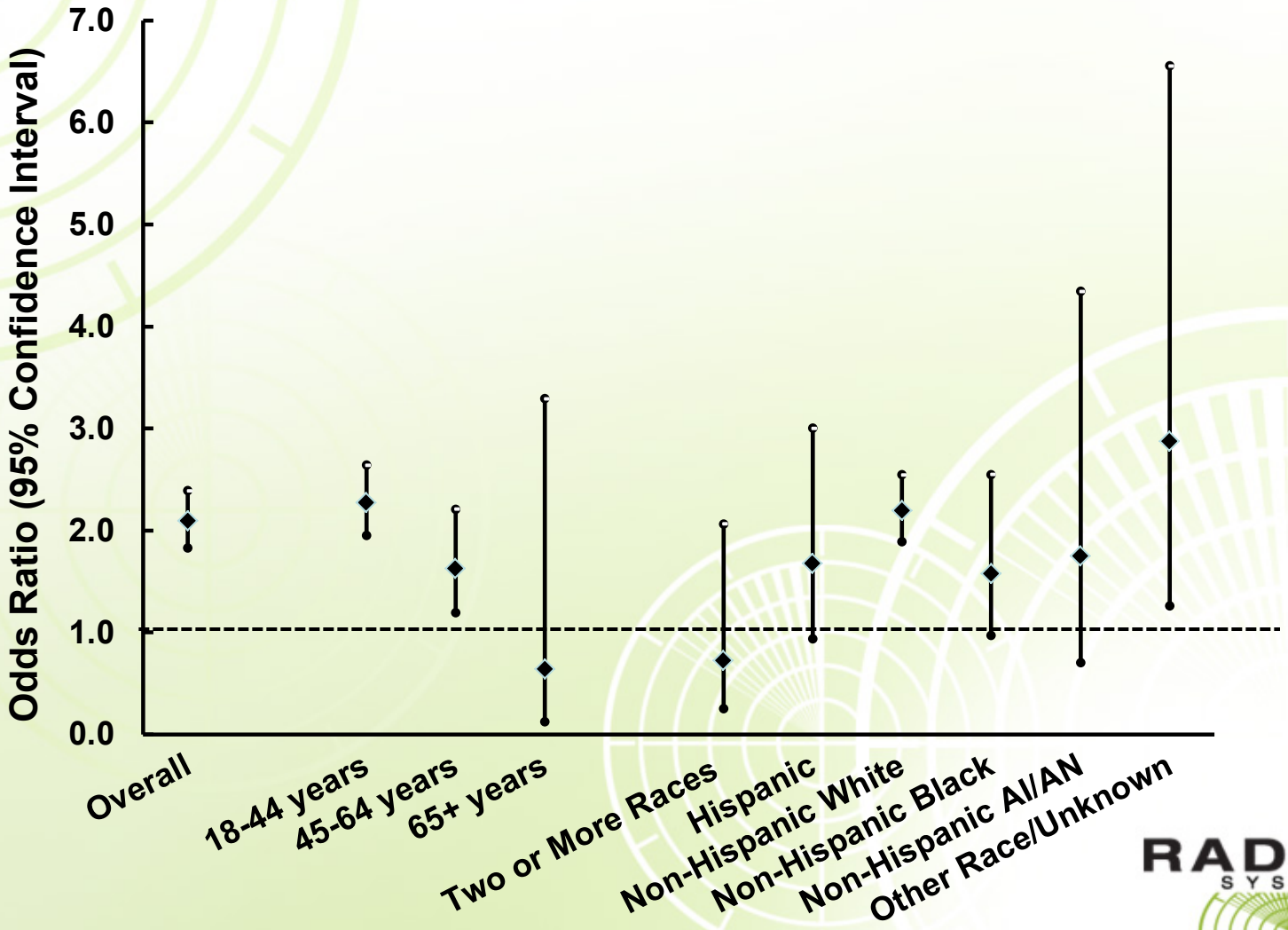
SA 7: Increase the number of admissions to substance abuse treatment for injection drug use

Treatment Center Programs Combined

Change in Odds of Illicit Drug Use 2011 to 2017 in Past Month



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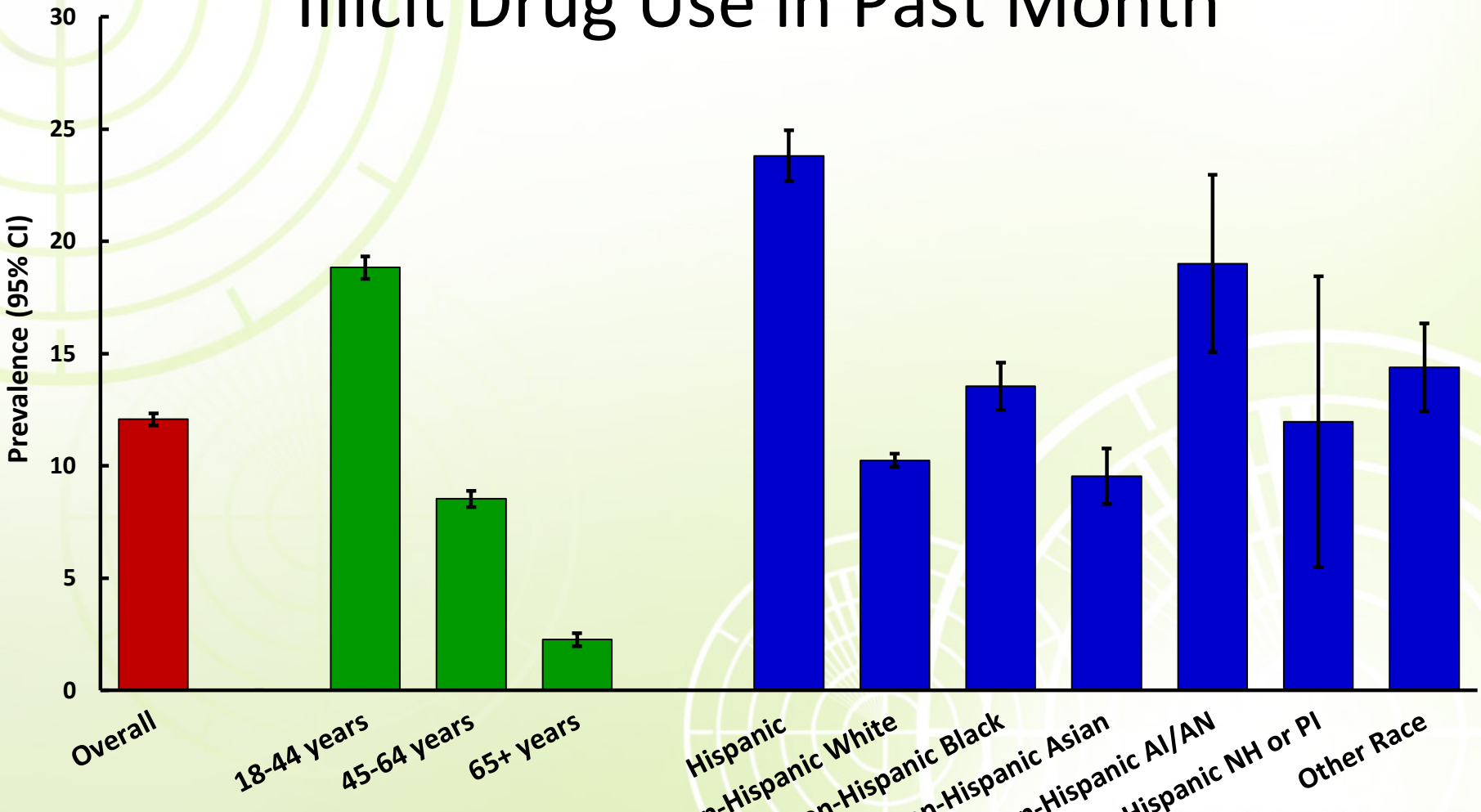
SA 13.3: Reduce the proportion of adults reporting use of any illicit drug in the past-month

2017 National Prevalence of Illicit Drug Use in Past Month



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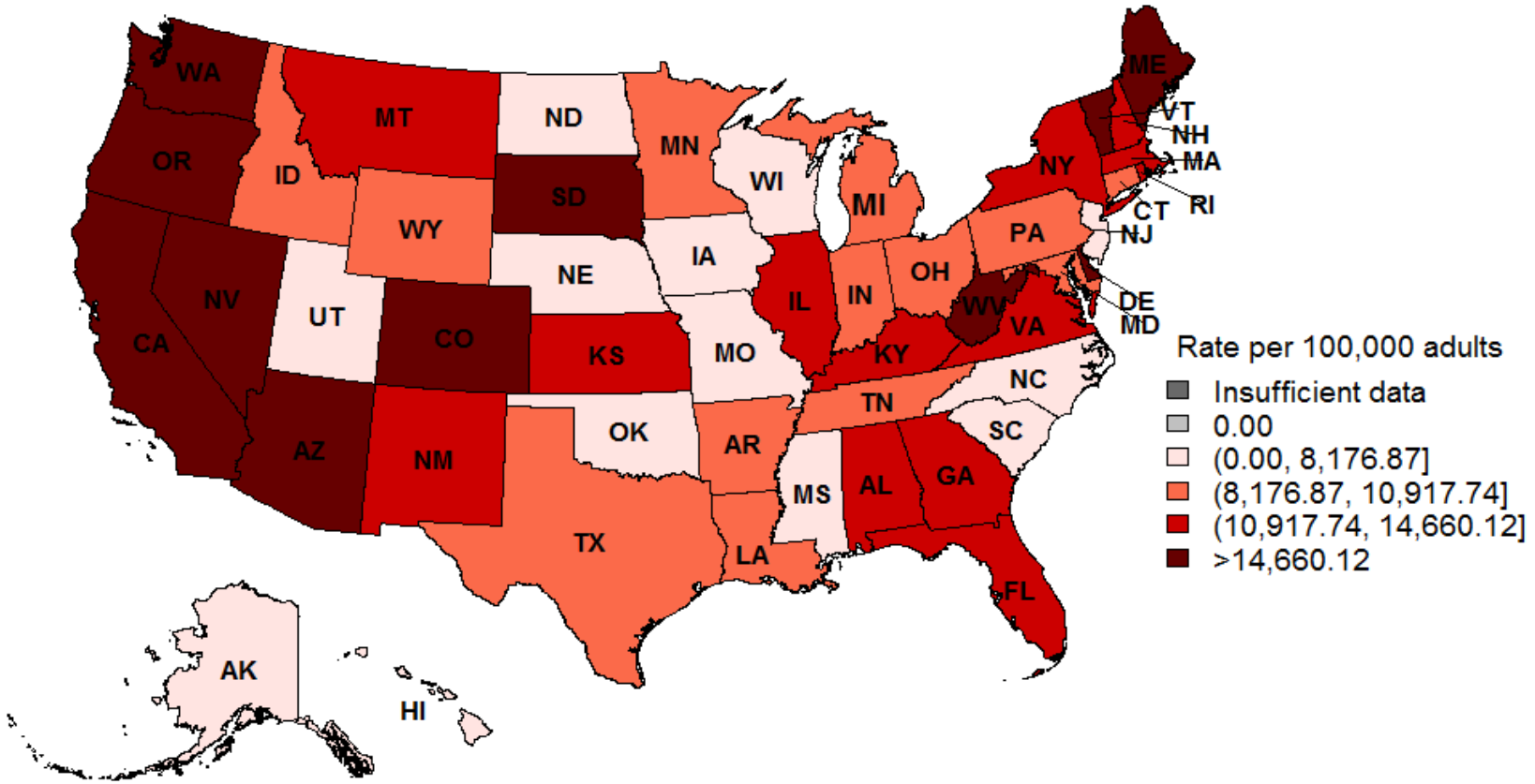
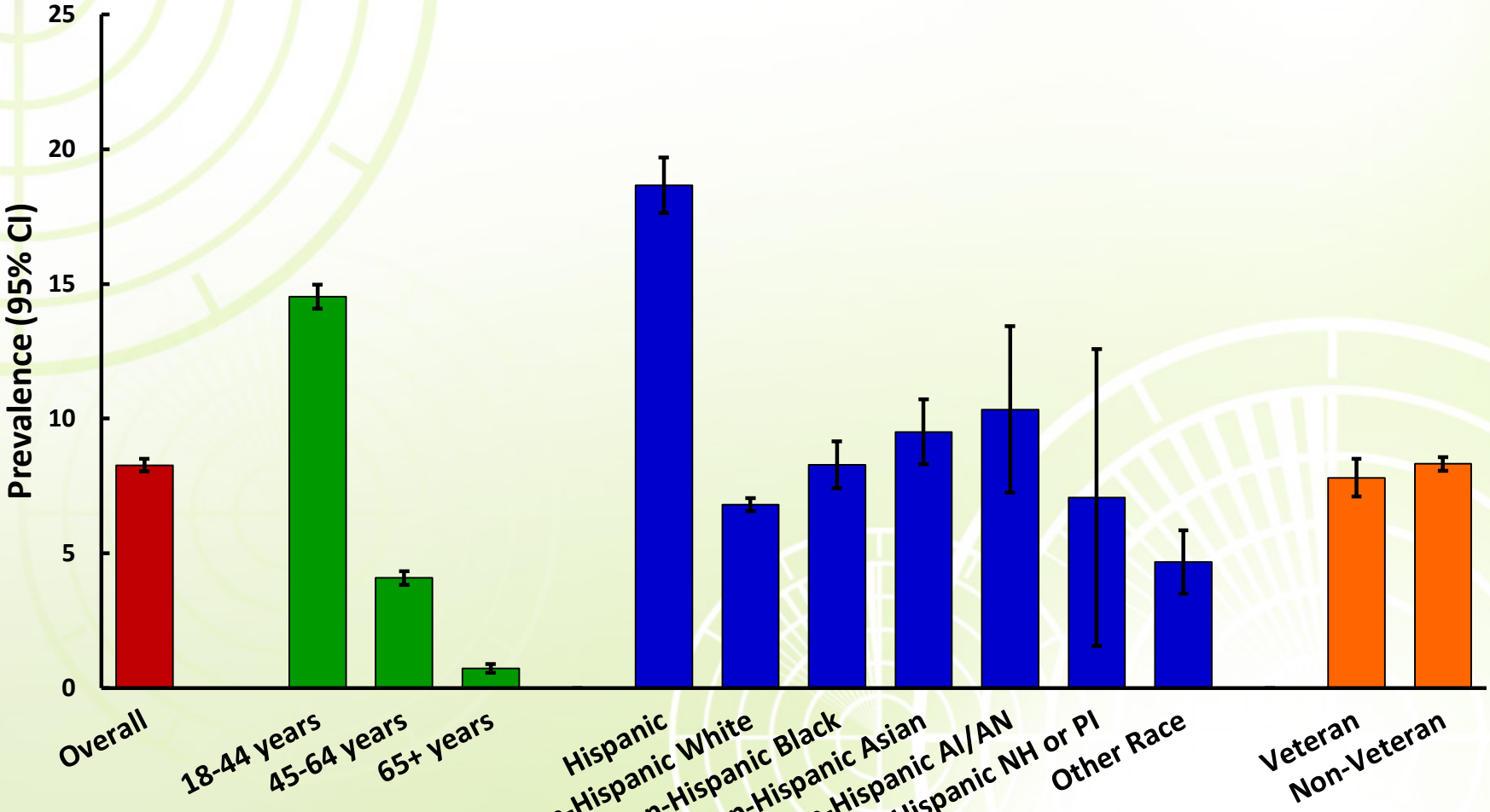
Any Illicit Drug Use Past Month

Population based rates per 100,000 adults



2017 National Prevalence of Non-Medical Use of Pain Relievers in Last Month



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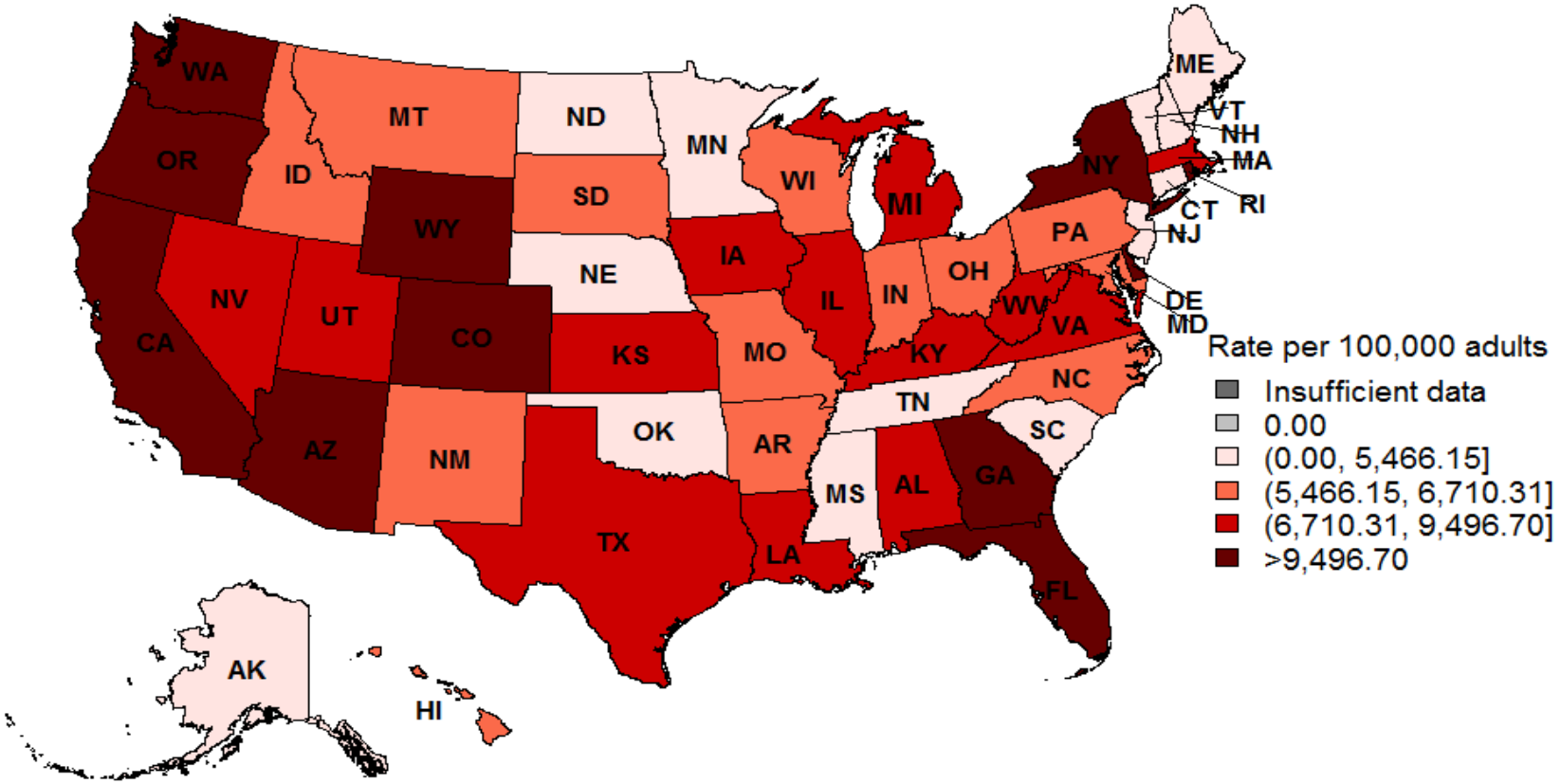
Non-Medical Use of Pain Relievers Use Past Month

Population based rates per 100,000 adults



Disparities of Interest

- Gender
- Geographic Region
- Age
- Race/Ethnicity
- Income
- Marital Status
- Education
- Student Status
- Veteran Status
- Healthcare Professional Status
- Pregnancy
- Chronic/Acute Pain History
- DAST-10 Score

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Conclusions

- **The RADARS System mosaic approach can compliment existing data to evaluate the Heathy People 2020 objectives**

- **Assessing progress on the objectives can be made in near real-time with various RADARS System data**
  - Treatment Center Programs Combined has data dating back to 2009 to assess trends
  - Survey of Non-Medical Use of Prescription Drugs Program began data collection in 2016Q3 and will continue semi-annually

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Questions

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