# Medication-Assisted Treatment (MAT) in High-Need Areas: How Health Centers can Improve Access to Treatment for Opioid Use Disorder with Vulnerable Populations

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## Abstract

**Background**: The opioid epidemic is adversely affecting cities across the US and disproportionately impacting vulnerable populations. Health centers are well-positioned to increase access to treatment. **Objective**: To identify health centers located in high-need areas based on drug poisoning mortality and explore their capacity to provide medication-assisted treatment (MAT). **Methodology**: Outlier and hot-spot analysis identify high-need counties based on drug poisoning mortality. We will overlay mapped health centers and stratify by current and potential capacity for MAT (based on their number of Drug Addiction Treatment Act of 2000 (DATA) waived providers and patients receiving MAT). **Results**: The results include maps and lists of health centers stratified by need (defined by drug-related mortality), health center capacity (defined by number of DATA waived providers), and MAT use (defined by the number of MAT patients). **Discussion**: The results can be used to support the role of health centers in providing treatment for opioid use disorder and inform future research and policies. For example, high-need awardees with low capacity can be targeted for outreach and funding to increase number of DATA waived providers; high-need awardees with high capacity but low current MAT use can be targeted for research, outreach, and technical assistance to close gaps in Opioid Use Disorder (OUD) care; and finally, high-need awardees with high capacity and high current MAT use can be targeted for research to understand why they have been successful and how they have overcome barriers.


## Research Questions

**What is health center MAT capacity in high-need counties (based on drug poisoning mortality)?**

**Where are health centers with MAT capacity but no patients utilizing MAT?**

## Methodology

**Step 1: Aggregate the number of drug poisoning deaths (2013-2015) by county (remove counties with zero deaths)**

**Step 2: Use Empirical Bayes (EB) approach to estimate death rate by county (adjusting for total population)**

**Step 3: Create excess risk maps to identify counties with drug poisoning death rates 1.5 X national average**

**Step 4: Use Local Moran's I (with EB rates) to identify clusters of drug poisoning death rates hot spot counties**

**Step 5: Overlay health centers and stratify by MAT capacity (# DATA-waived providers; # patients receiving MAT)**

## Defining High-Need

**Counties with drug poisoning death rates 1.5 X higher than national average (Excess Risk)**

OR

**Counties that are part of a drug poisoning death rate "hot spot"**

## Priority Health Center Criteria

### High-Need, No MAT Capacity

**Health Centers with No DATA Waived Provider**

AND

**Located in High-Need County**

### High-Need, MAT Capacity, No MAT Patients

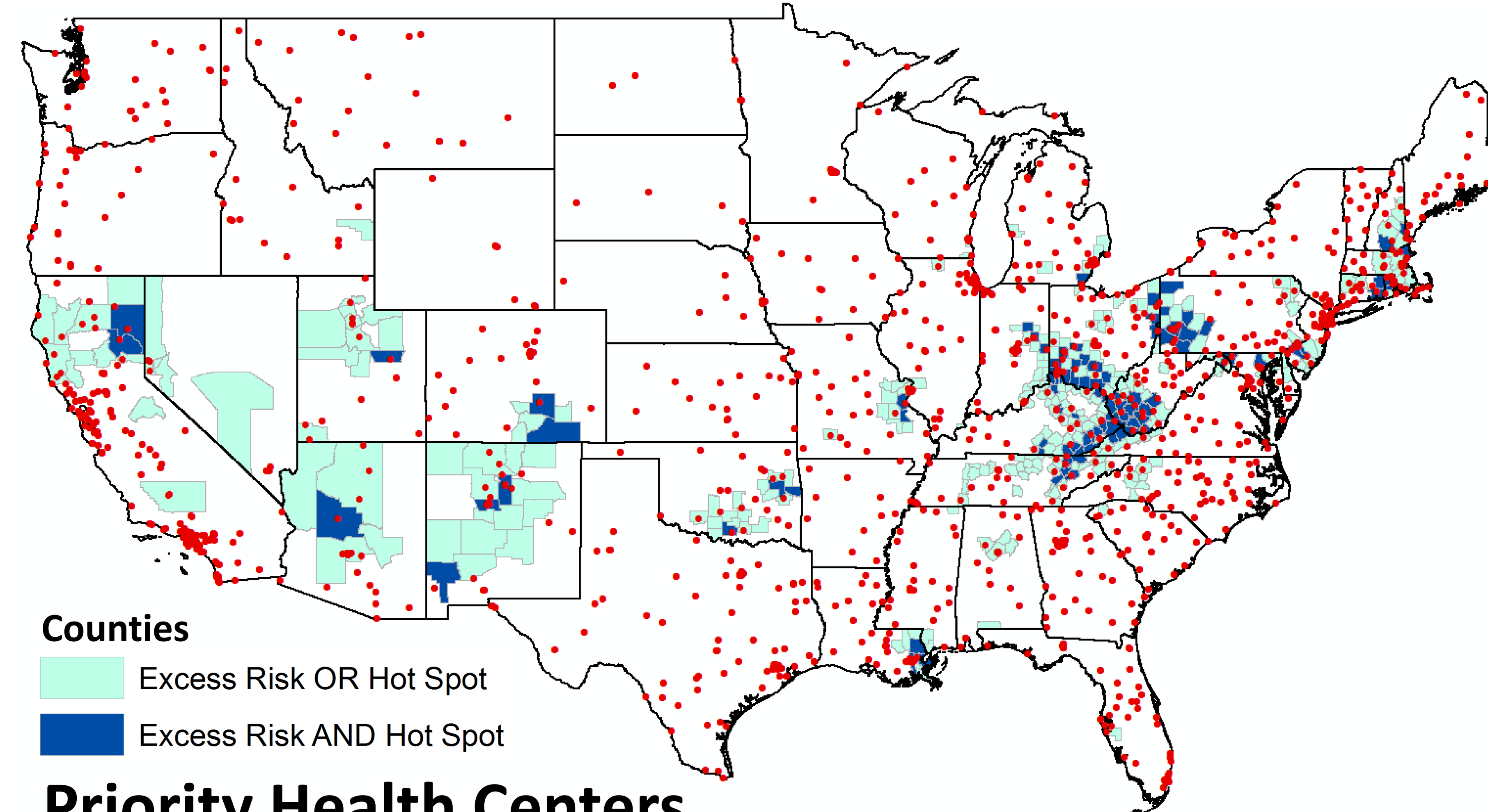
**Health Centers with at least 1 DATA Waived Provider**

AND

**No MAT Patients AND Located in High-Need County**

## Results

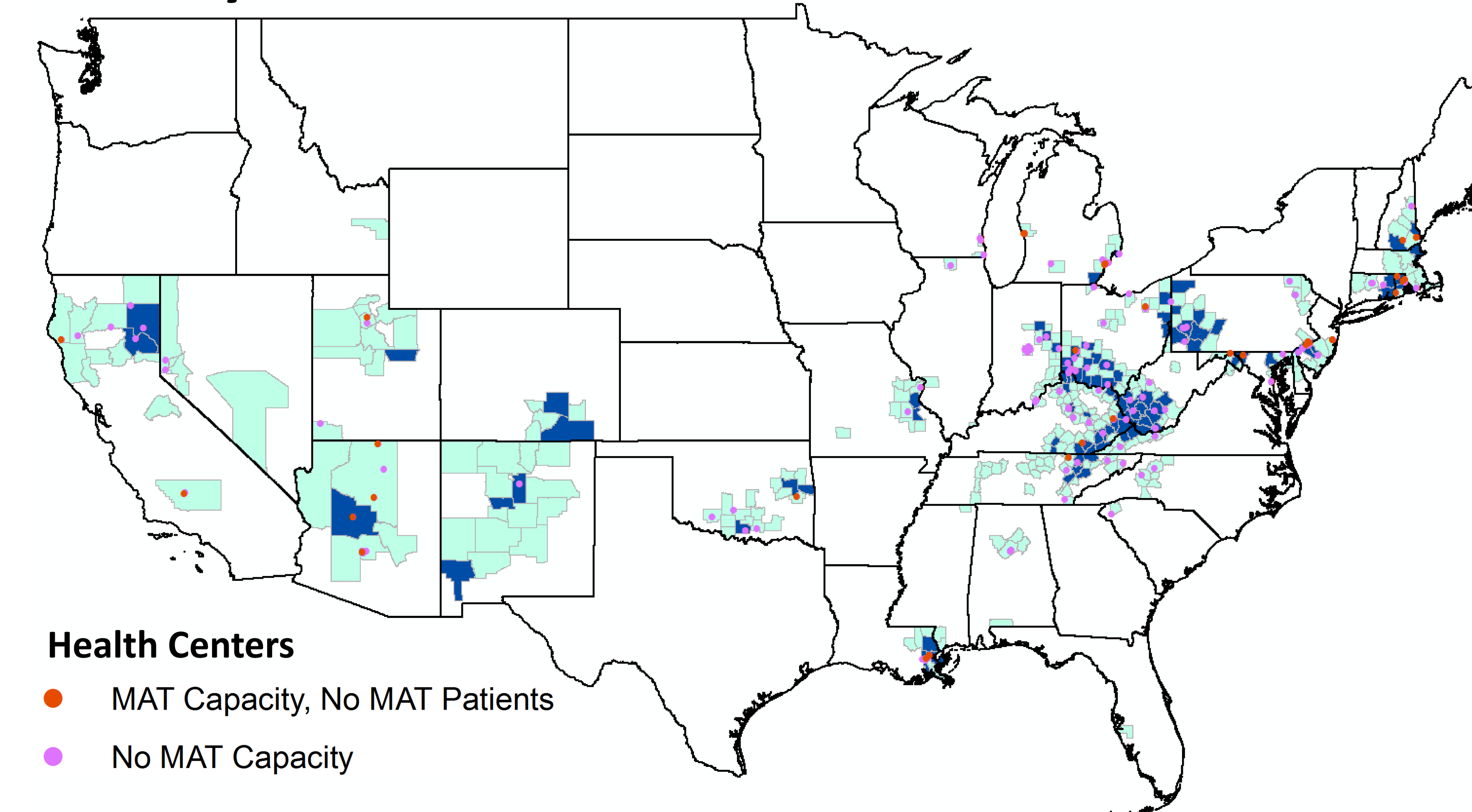
### All Health Centers




**Priority Areas – 368 Counties**
**Drug Poisoning Mortality**
**(ICD-10 Codes – X40-X44, X60-X64, Y10-Y14)**
**Priority Counties - 25.8 rate per 100,000**
**All Counties – 15.2 rate per 100,000**

**All Health Centers (HCs) – 1,430**
**# HCs with MAT Capacity – 588**
**# HCs w/MAT Capacity, No MAT Patients – 117**
**2,973 Physicians, 64,596 Patients**
**22 Patients per Physician**

### Priority Health Centers




**HCs in Priority Areas – 281**
**# HCs in Priority Areas w/MAT Capacity - 156**
**HCs in Priority Areas w/MAT Capacity, No MAT patients - 32**
**739 Physicians, 24,254 Patients**
**33 Patients per Physician**

**HCs in Priority Areas, No MAT Capacity - 125**

## Conclusions

The results can be used to support the role of health centers in providing treatment for opioid use disorder and inform future research and policies.

- high-need awardees with low capacity can be targeted for outreach and funding to increase number of DATA waived providers;
- high-need awardees with high capacity but low current MAT use can be targeted for research, outreach, and better understand how to close gaps in OUD care;
- and finally, high-need awardees with high capacity and high current MAT use can be targeted for research to understand why they have been successful and how they have overcome barriers.

**Data Sources:** Uniform Data System, 2017, Health Resources and Services Administration (HRSA); Drug Poisoning Mortality Data, 2013-2015, National Association for Public Health Statistics and Information Systems (NAPHSIS); American Community Survey, 2013-2017.