New England Regional Judicial Opioid Initiative

Action Researcher Report

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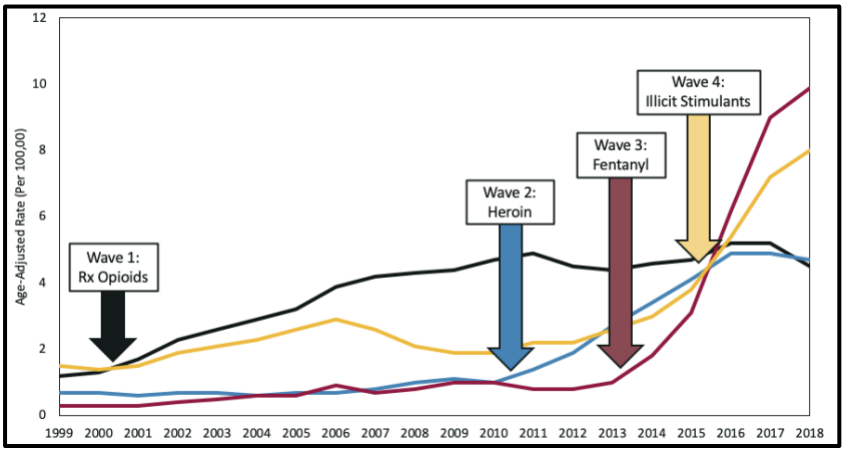
INTRODUCTION

The overdose epidemic persists in the United States, with over 67,000 overdose deaths in 2018, approximately 70% of which involved an opioid (1). However, the role of opioids has varied dramatically across three time periods over the course of the epidemic, each resulting in increasing death rates (2). The first wave began in the 1990s and was characterized by prescription opioid-related deaths (3, 4). Reduced availability of these prescription medications contributed to the second wave of the epidemic, which began in 2010 and was driven by increasing heroin use and a corresponding increase in illicit opioid deaths (3,5,6). The third wave started in 2013 and has been driven by illicit fentanyl, a synthetic opioid that is up to 100 times more potent than morphine (7, 8). An emerging fourth wave has closely followed illicit fentanyl and consisted primilary of illicit stimulants driven through polysubstance use (9) (Figure 1). Additionally, the US is experiencing a syndemic with the recent crisis of the COVID-19 pandemic, which may be contributing to higher rates of overdose deaths. Research shows that the side effects of COVID-19, such as isolation, limited access to treatment services, and financial strain, may be contributing to a recent spike in overdose deaths (10, 11).

Figure 1: Waves of the Overdose Epidemic



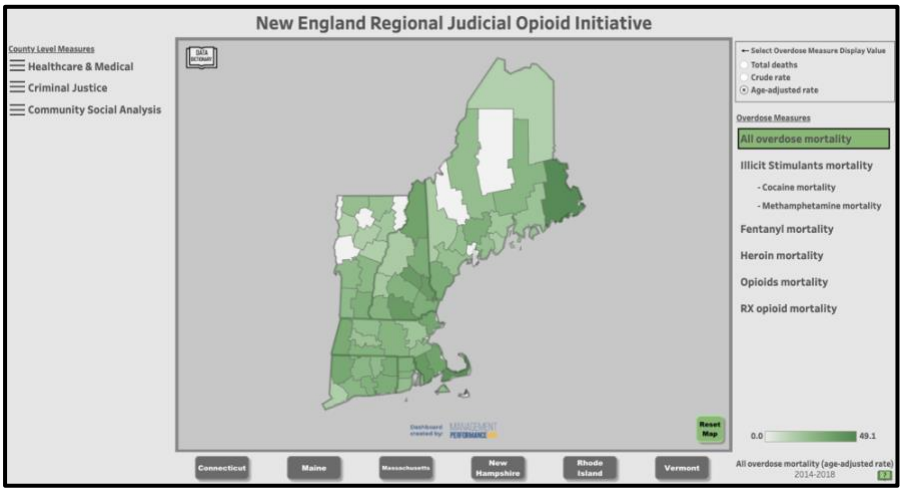
The New England Regional Judicial Opioid Initiative (NE-RJOI)

In order to combat the overdose epidemic, six New England states—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont—established the New England Regional Judicial Opioid Initiative (NE-RJOI), a multi-state collaborative aimed at developing regional solutions to the overdose epidemic from a court perspective while strengthening collaboration among stakeholders. Participants include chief justices, state courts, state criminal justice agencies, supervision agencies, state public health agencies, legislators, treatment providers, medical experts, and child welfare representatives. According to 2018 data, this region has some of the highest rates of overdose deaths in the nation (12). The National Center for State Courts (NCSC) provides project management for the collaborative initiative. To address data and research needs of the NE-RJOI, a data action partner, Dr. Brad Ray and the Center for Behavioral Health and Justice (CBHJ) at Wayne State University, was tasked with informing decision-making around potential public health strategies. In relation to the project thus far, the research team has conducted a policy and network analysis of the NE-RJOI states regarding their response to the overdose epidemic, used survey data from NE-RJOI stakeholders to establish a baseline social network analysis (SNA) of the NE-RJOI, and worked with NCSC and NE-RJOI leadership to solicit information on updates or future directions for the Prescription Drug Abuse Policy System (PDAPS) policy areas specific to overdose prevention.[1] The purpose of the current report is to provide a county-level hotspot analysis of the NE-RJOI region using publicly available data that are integrated into the new online visualization tool. Following this, findings are reported from an Opioid Funds Allocation Survey taken by stakeholders in NE-RJOI states and policy recommendations are identified based on these results and the data visualization tool.

[1] Report can be viewed here: https://tinyurl.com/y27lv83x

HOTSPOT ANALYSIS

Figure 2: NE-RJOI Data Visualization Tool



To aid in assessing and addressing the overdose crisis in the New England region, researchers from the CBHJ developed an interactive online data visualization tool at the county level of NE-RJOI states hosted online using Tableau software by the Indiana Management Performance Hub (MPH) (Figure 2). The data visualization tool presents several measures relevant to the overdose crisis.[2] The data highlighted in the NE-RJOI visualization tool comes from publicly available data sources. To date, the visualization integrates sociodemographic and economic indicators, as well as rates of drug overdose deaths, buprenorphine prescribers, and prescription drug monitoring program (PDMP) statistics. This tool highlights important overdose hotspots and overlays these with additional contextual data which can be useful in developing projects, programs and policies to address factors relevant to the overdose crisis. This tool can be a helpful visualization in presenting a problem statement for grant applications, informing policy makers, and developing regional strategic initiatives.

To identify substance-specific trends in counties of the NE-RJOI region, the visualization includes counts and rates of all overdose mortality, opioid mortality, and illicit stimulant mortality, as well as breakdowns by opioid type (i.e. prescription opioids, heroin, or fentanyl) or illicit stimulant type (i.e. cocaine or methamphetamine). The county-level overdose measures are displayed as total deaths, crude rates (deaths per 100,000 persons), and age-adjusted rates (deaths per 100,000 persons, adjusting for population aged 15-64). By using rates instead of raw counts, we can compare overdose outcomes between counties with different populations. Further, we pool overdose data over 5 years (2014 to 2018) to avoid data suppression (i.e. the Centers for Disease Control and Prevention [CDC] does not provide data when the number of deaths is less than 10). Thus, overdose mortality rates reflect the average over a 5-year period, using the most recent data available (Table 1). While the visualization does not show changes over time, observing these trends in aggregate reveals stark patterns of opioid mortality in the region.

For overdose deaths, the NE-RJOI region experiences an average age-adjusted rate of 28.0 overdose deaths per 100,000—higher than the national average of 22.6. Similarly, the U.S. opioid overdose mortality rate is an average of 17.1 deaths per 100,000, compared to 24.8 opioid overdose deaths per 100,000 in the NE-RJOI states. Regarding stimulants, the region-wide NE RJOI age-adjusted mortality rate is 8.1 per 100,000, slightly higher than the national average of 7.1 per 100,000. *Figure 3* identifies the NE-RJOI counties most affected by the overdose crisis, with the darker counties representing the highest age-adjusted mortality rates by overdose type. High overdose mortality is widespread throughout the New England region, especially along the Atlantic Coast and for counties on state borders, e.g. Maine and New

[2] NE-RJOI data visualization tool and data dictionary can be found here: https://tinyurl.com/yy346kkz

Hampshire, New Hampshire and Massachusetts, and Massachusetts and Rhode Island. All overdose mortality trends are driven largely by overdoses involving opioids.

Table 1: Hotspot Counties by NE RJOI State using Age-Adjusted Overdose Rates, Pooled 2014-2018

State	All Overdose		Any Opioid		Any Illicit Stimulant	
Connecticut	Litchfield County	34.8	Litchfield County	31.3	Middlesex County	9.1
	Windham County	33.8	Windham County	29.7	Tolland County	8.7
	New London County	32.6	New London County	28.7	New Haven County	8.5
Maine	**Washington County**	**49.1**	**Washington County**	**45.3**	Kennebec County	8.5
	York County	32.7	York County	29.1	York County	7.8
	Kennebec County	31.9	Kennebec County	28.7	Penobscot County	7.5
Massachusetts	Barnstable County	45.6	Barnstable County	41.0	**Essex County**	**12.8**
	Bristol County	41.1	Bristol County	37.2	Plymouth County	11.8
	Plymouth County	37.2	Plymouth County	33.9	Suffolk County	10.9
New Hampshire	Belknap County	40.9	Strafford County	37.6	Hillsborough County	6.6
	Strafford County	40.8	Hillsborough County	37.4	Strafford County	6.6
	Coos County	37.0	Belknap County	36.8	Rockingham County	5.6
Rhode Island	Providence County	30.6	Providence County	26.4	Providence County	12.2
	Kent County	30.1	Washington County	20.8	Kent County	10.6
	Washington County	24.9	Bristol County	20.7	Washington County	9.4
Vermont	Windham County	31.9	Windham County	26.9	Windham County	12.4
	Windsor County	27.6	Windsor County	25.2	Chittenden County	5.1
	Rutland County	26.7	Rutland County	22.8	-	-

Notes. Age-adjusted rate (per 100,000 people) for population aged 15 to 64. Underlying cause-of-death ICD codes include X40-X44, X60-X64, X85, Y10-Y14. Data source: CDC WONDER Database

That is, overdoses involving opioids comprise the largest share of overall overdoses. However, high illicit stimulant mortality or overdoses involving the substances cocaine and methamphetamine, overlaps with high opioid mortality along the Atlantic coast and reaches into rural counties in Maine and Vermont. In fact, some counties in the New England region experience higher rates of illicit stimulant mortality than opioid mortality, reflecting the complicated nature of the overdose crisis.

Figure 3: NE-RJOI County-Level Overdose Mortality by Substance Type, 2014-2018

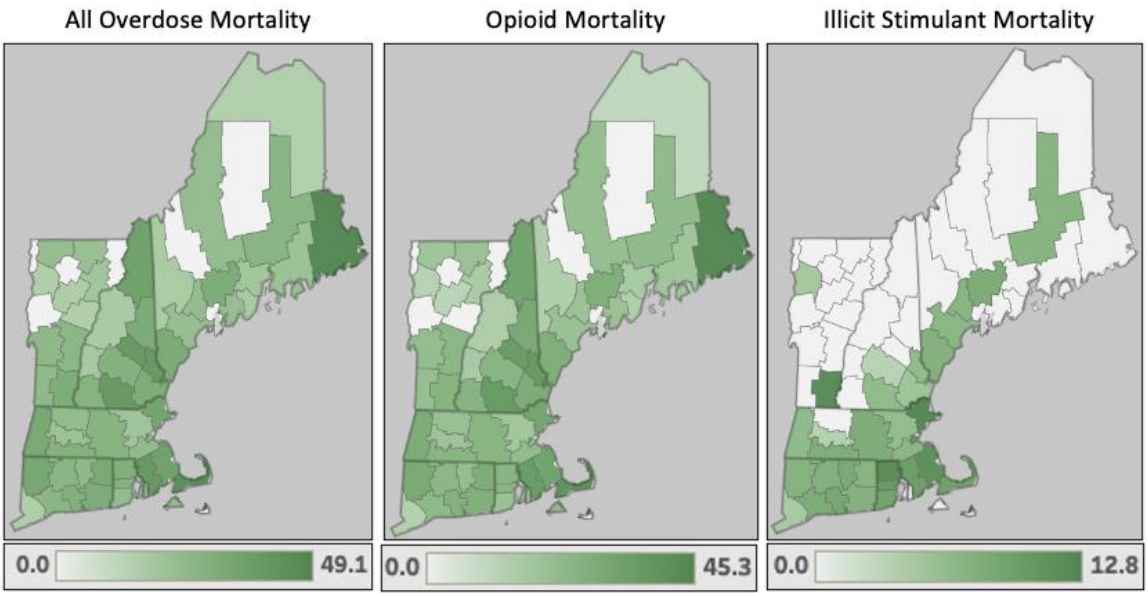
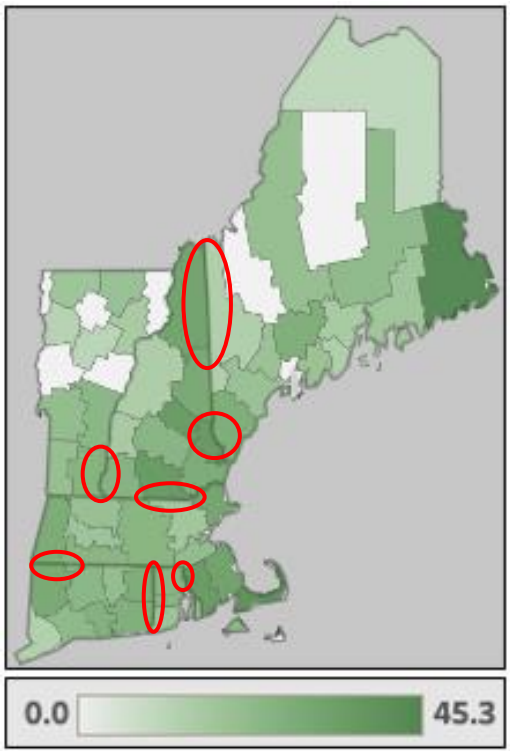


Figure 4: Opioid Overdose Deaths, Age-Adjusted Rates, 2014-2018



There are several important overdose hotspots within the NE-RJOI states. Looking at the average age-adjusted rate of opioid overdoses (Figure 4), the Eastern-most counties of Maine (Washington and Penobscot counties) comprise an important hotspot, with access to the Atlantic coast. Most other opioid-related hotspots occur within counties on state lines. In Connecticut, for example, opioid overdoses are concentrated in Litchfield County, bordering Massachusetts, Windham County, bordering both Massachusetts and Rhode Island, and New London County, which also shares a border with Rhode Island. High opioid overdose rates are also observed on the border between New Hampshire (Strafford and Coos counties) and Maine (York county); New Hampshire (Cheshire county) and Vermont (Windham); and Massachusetts (Bristol county) and Rhode Island (Providence county). Overall, counties with high rates of opioid overdoses are concentrated in the southern-most counties in the region.

Within the NE-RJOI region, there are also important differences between high- and low-mortality counties (Table 2). Among all counties (67), half are classified as metropolitan (34), or located in a metropolitan statistical area (MSA), with the rest classified as nonmetropolitan (33). Of the nonmetro counties, only one-fourth have high overdose mortality, compared to more than half of metro counties. This suggests that the nature of the overdose crisis in the NE-RJOI region is perhaps more acute in urban, more populous areas. Additionally, a county's dependence on a particular economic sector may reveal relationships between the local economy and drug mortality (13).

Table 2: NE-RJOI Counties, by Low- and High-Mortality

	Counties			Population		
State	Low Mortality	High Mortality	Total	Low Mortality	High Mortality	Total
Connecticut	2	6	8	1,839,078	1,742,426	3,581,504
Maine	12	4	16	824,724	508,089	1,332,813
Massachusetts	9	5	14	3,972,673	2,857,520	6,830,193
New Hampshire	4	6	10	358,651	985,061	1,343,712
Rhode Island	1	4	5	83,075	973,536	1,056,611
Vermont	10	4	14	305,085	319,902	624,987
Total	**38**	**29**	**67**	**7,383,286**	**7,386,534**	**14,769,820**

Notes. High mortality counties include those with the highest age-adjusted overdose rates among NE RJOI states, while low mortality counties include all others.
Data sources: CDC WONDER Database, 2018 American Community Survey (ACS)

As a healthcare and medical indicator, the data visualization displays the county opioid prescribing rate, or the number of opioid prescriptions dispensed per 100 people. Empirical evidence finds that features of the US healthcare system increased the availability of prescription opioids across nearly all medical disciplines (14–16). Patterns of opioid prescribing can help explain high rates of fatal opioid overdoses in the region. Analysis of the NE-RJOI data visualization tool show that the highest opioid prescribing rate,

83.9 prescriptions per 100 people, occurs in Kennebec County, Maine, which is a hotspot for both opioid and stimulant overdoses. Other counties with high opioid prescribing rates are also among those with large overdose rates, including Franklin County, Vermont (79.1), Carroll County, New Hampshire (65.1), Strafford County, New Hampshire (64.8), Kent County, Rhode Island (62.3), and Bristol County, Massachusetts (62.1) (Table 3). Similarly, research shows that access to substance use treatment, combined with medications for opioid use disorder (MOUD) may lower county overdose rates (17–22). Medications for OUD are made available through different avenues, including physicians waivered to prescribe buprenorphine as well as opioid treatment programs (OTPs), programs federally certified to provide medication for opioid use disorder.

Table 3: County Healthcare Indicators, NE-RJOI States

State	Opioid Prescribing Rate		Buprenorphine Provider Rate		OTP Provider Rate	
Connecticut	Windham County*	61.0	New Haven County*	42.6	Windham County*	1.7
	New London County*	55.0	Middlesex County*	28.2	New London County*	1.5
	Middlesex County*	54.5	Hartford County	26.6	New Haven County*	1.4
Maine	**Kennebec County***	**83.9**	**Washington County***	72.6	Washington County*	3.2
	Aroostook County	63.5	Kennebec County*	50.2	Knox County	2.5
	Piscataquis County	63.4	Penobscot County*	44.8	Penobscot County*	2.0
Massachusetts	Bristol County*	62.1	Franklin County	69.1	Franklin County	4.2
	Hampden County	57.7	Suffolk County*	65.7	Berkshire County	2.4
	Berkshire County	51.8	Berkshire County	62.8	Hampshire County	1.9
New Hampshire	Carroll County*	65.1	Grafton County	55.7	Merrimack County	1.3
	Strafford County*	64.8	Coos County*	40.6	Cheshire County	1.3
	Merrimack County	60.0	Carroll County*	31.4	Grafton County	1.1
Rhode Island	Kent County*	62.3	Providence County*	37.7	Washington County*	3.2
	Washington County*	56.2	Kent County*	28.7	Providence County*	2.5
	Newport County	50.4	Bristol County*	24.5	Newport County	2.4
Vermont	Franklin County	79.1	Orange County	51.8	**Windham County***	7.0
	Rutland County*	65.6	Windham County*	46.3	Franklin County	4.1
	Bennington County	62.5	Caledonia County	46.0	Orleans County	3.7

** Counties with high overdose rate*

Notes. The opioid prescribing rate refers to the number of opioid prescriptions dispensed per 100 people. Both buprenorphine and opioid treatment program (OTP) rates refer to the number of providers per 100,000 people. All values are measured at the county level.

Data sources: CDC National Center for Injury Prevention and Control, Substance Abuse and Mental Health Services Administration (SAMHSA)

All but one county in the NE-RJOI region, Grand Isle County, Vermont, has a buprenorphine provider; however, 24 counties do not have an OTP. Because of the nexus between substance use and crime (23–25), the visualization also features several criminal justice measures. One of these measures is the confinement rate, which refers to the incarcerated population in jails (pretrial or otherwise) and prisons per 100,000 people in a county. Data within the visualization tool show an association between high rates of confinement and overdose morality. For example, Knox County, Maine has the highest confinement rate in the region at 2,724 incarcerated individuals per 100,000 persons in the county, followed by Tolland County, Connecticut; Coos County, New Hampshire; and New London County, Connecticut—all of which are high overdose mortality counties (Table 4). Considering the correlation between confinement and overdose mortality, NE-RJOI stakeholders may consider implementing programs aimed at persons with substance use disorder in jail, such as expanding the availability of Medication for Opioid Use Disorder (MOUD) or treatment programs aimed at people leaving jail.

Lastly, the NE-RJOI visualization presents a measure of community social vulnerability. Social vulnerability describes the resilience of communities when faced with a crisis, including natural disasters, hazardous events, and disease outbreaks (25, 26). The social vulnerability measure is comprised of four different

themes that refer to ways in which a community may be vulnerable: socioeconomic status, household composition and disability, minority status and language, and housing and transportation. Two measures of overall community wellbeing were used in data analysis: Distressed Community Index and the Social Vulnerability Index. Each index uses a scale between 0 and 100, with values closer to 100 indicating higher levels of vulnerability. The most distressed county in the NE RJOI region is Washington County, Maine (75.5) followed by Coos County, New Hampshire (68.1); Essex County, Vermont (67.7); Aroostook County, Maine (67.6); and Piscataquis County, Maine (66.5). Of these counties classified as "at-risk," both Washington (ME) and Coos (NH) counties have high overdose death rates. Turning to social vulnerability, Hampden County, Massachusetts is ranked as most vulnerable in the region, with an index of 82.3. The next most vulnerable counties include Providence County, Rhode Island (75.9); Suffolk County, Massachusetts (73.8); and Washington County, Maine (64.4); all of which have high overdose death rates (Table 4).

Table 4: County Criminal Justice Indicators, NE RJOI States

State	Property Crime Rate		Violent Crime Rate		Confinement Rate	
CT	New Haven County*	2741.8	New Haven County*	1830.2	Tolland County*	2130.0
	Hartford County	2434.1	Hartford County	1498.9	New London County*	1334.8
	Fairfield County	1693.3	Fairfield County	1320.4	Hartford County	703.1
ME	Somerset County*	2940.2	Washington County*	997.0	**Knox County**	**2724.6**
	Kennebec County*	2836.0	Piscataquis County	870.5	Washington County*	451.2
	Penobscot County	2835.6	Kennebec County*	789.0	Cumberland County	205.2
MA	**Hampden County**	**3266.8**	**Suffolk County***	**4041.3**	Plymouth County*	388.0
	Nantucket County	3071.8	Hampden County	3084.3	Middlesex County	365.6
	Suffolk County*	2891.5	Bristol County*	2676.1	Norfolk County	356.5
NH	Belknap County*	3110.2	Hillsborough County*	1227.7	Coos County*	1657.4
	Strafford County*	2414.9	Belknap County*	1075.2	Merrimack County	950.1
	Carroll County*	2205.3	Strafford County*	1074.6	Belknap County*	430.4
RI	Providence County*	2832.0	Providence County*	1659.5	Providence County*	538.0
	Newport County	2423.1	Newport County	931.7	-	-
	Kent County*	2193.9	Kent County*	605.4	-	-
VT	Rutland County*	3062.1	Windham County*	991.9	Orleans County	1256.0
	Chittenden County*	2676.9	Rutland County*	836.8	Windsor County*	810.1
	Windham County*	2470.5	Franklin County	805.5	Caledonia County	719.8

** Counties with high overdose rates*

Notes. The property crime rate is the number of Type I property crimes (burglary, larceny, motor vehicle theft, and arson) per 100,000 people. The violent crime rate is the number of Type I violent crimes (murder, rape, robbery, and aggravated assault) per 100,000 people. The confinement rate refers to the number of incarcerated Americans per 100,000 people. All values are measured at the county level.

Data source: Vera Institute of Justice

OPIOID ALLOCATION SURVEY

To understand NE-RJOI stakeholder preferences for how to address opioid overdose in their states, CBHJ researchers conducted a survey based on a New York Times study, the results of which were published in 2018 (28). The survey asks participants to allocate a theoretical budget of $100 million to spend over five years to address the opioid epidemic in each participant's state. In the survey, participants were provided the ability to allocate the funds to specific programs, policies, and initiatives in four strategic categories: Demand Reduction/Prevention, Harm Reduction, Supply Reduction and Treatment (Figure 5). The survey was sent to NE-RJOI stakeholders who were asked to share the survey link with colleagues in their states who are employed in courts or the legal field, healthcare or public health, behavioral health, social services, and law enforcement or public safety. Although anonymous, the participants in this sample were asked to identify their field of employment and the state in which they live. The survey was developed utilizing Qualtrics web-based survey software, and a link was shared with RJOI stakeholders on June 19, 2020 and was open for responses for one month.

Figure 5: Categories of Allocation Items

Demand Reduction/Prevention	Supply Reduction
Reintegration after incarceration	Police funding & training
Pain research	Drug diversion reduction
Community development	Prescription drug monitoring program
Public education	
Harm Reduction	**Treatment**
Overdose surveillance	Community corrections
HIV & Hepatitis prevention	Jail-based treatment
Supervised consumption	Broad substance use disorder treatment
Naloxone expansion	Research & evaluation of treatment
Drug testing technologies	Medication-assisted treatment
Syringe exchange programs	MEDICAID expansion
	Recovery supports
	Rural & underserved communities treatment

A total of 851 participants in NE-RJOI states completed the Opioid Allocation Survey. Table 5 breaks down survey responses by state and field of employment. Most respondents were from Connecticut (n=468, 55%) and Massachusetts (n=199, 23%) and were employed in court/legal professions (n=429, 50%) or behavioral health settings (n=268, 31%). Because this is a convenience sample, the survey results should not be considered generalizable; however, they offer insight into how a group of relevant stakeholders in each NE-RJOI state would respond to the opioid and overdose crises.

Table 5: NE-RJOI Opioid Allocation Survey respondents by State and Employment Type

Employment Type by State	Total N=851	CT n=468	ME n=31	MA n=199	NH n=62	RI n=52	VT n=39
Behavioral health	268 (31%)	132 (28%)	8 (26%)	71 (36%)	9 (15%)	27 (52%)	21 (54%)
Court/Legal	429 (50%)	307 (66%)	13 (42%)	44 (22%)	41 (66%)	9 (17%)	15 (38%)
Healthcare and/or Public Health	94 (11%)	5 (1%)	7 (23%)	65 (33%)	6 (10%)	9 (17%)	2 (5%)
Law enforcement and/or Public Safety	35 (4%)	14 (3%)	1 (3%)	14 (7%)	1 (2%)	5 (10%)	0 (0%)
Social Services	25 (3%)	10 (2%)	2 (6%)	5 (3%)	5 (8%)	2 (4%)	1 (3%)

Figure 6 indicates the average proportion of the budget that survey respondents allocated toward each possible policy, program or initiative aimed at addressing the opioid epidemic. The colors of the boxes in the chart refer to one of the four policy categories mentioned above. At an average of approximately 12.5% of the budget, survey respondents allocated the most amount of money toward reintegration after incarceration. This may reflect respondent knowledge of scientific documentation that people are at high risk of fatal overdose following incarceration, particularly those with substance use disorder (29–32). Relatedly, survey participants allocated the next highest average amount of money (9.8% of the budget) toward treatment for substance use disorder and another 8.4% to recovery supports. Community development was another category that received priority in terms of money allocated toward addressing the opioid epidemic. Participants allocated the least amount of money (2% of the budget) toward syringe service programs (SSPs), public health programs that typically offer unused syringes, sharps collection boxes, treatment linkage and other health and disease prevention services to community members that use injection drugs. Although SSPs certainly face public stigma (33), they have been found to be cost-saving, effective at reducing the transmission of infectious diseases (34,35), and more likely to engage participants in substance abuse treatment (36). Furthermore, the Centers for Disease Control (CDC) sites studies that have shown these programs do not contribute to increases in illegal drug use, crime, nor discarded needles in the communities where these outcomes were assessed (37).

Treatment services were allocated almost half of the budget (45%), followed by demand reduction and prevention at around or 31%, then harm reduction at 15%, and supply reduction at 10%. Figure 7 demonstrates the average budget allocation by respondents' professional field and policy, program, or initiative category. There is a strong preference among respondents of all professions for allocating funds toward treatment services. The clear prioritization of funds toward treatment services may reflect respondents' knowledge of the relatively high rates of SUD and overdose in the New England region. The next clear preference for funds allocation is toward demand reduction or substance use prevention strategies, which include initiatives such as public education, research, community development and reintegration. These strategies aim to reduce the likelihood of substance misuse among the population. The strategic categories with the least amount of average funds allocated across all professional fields are Harm Reduction (74.6% of the budget) and Supply Reduction (49.5% of the budget). However, respondents in healthcare or public health professions indicated an allocation preference for harm reduction initiatives compared to those in law enforcement or public safety and social services who allocated a slightly higher average amount of money toward supply reduction. Those in court or legal professions allocated a similar amount of money toward both harm reduction and supply reduction strategies.

Figure 6: NE-RJOI Overall Opioid Allocation Survey Decisions

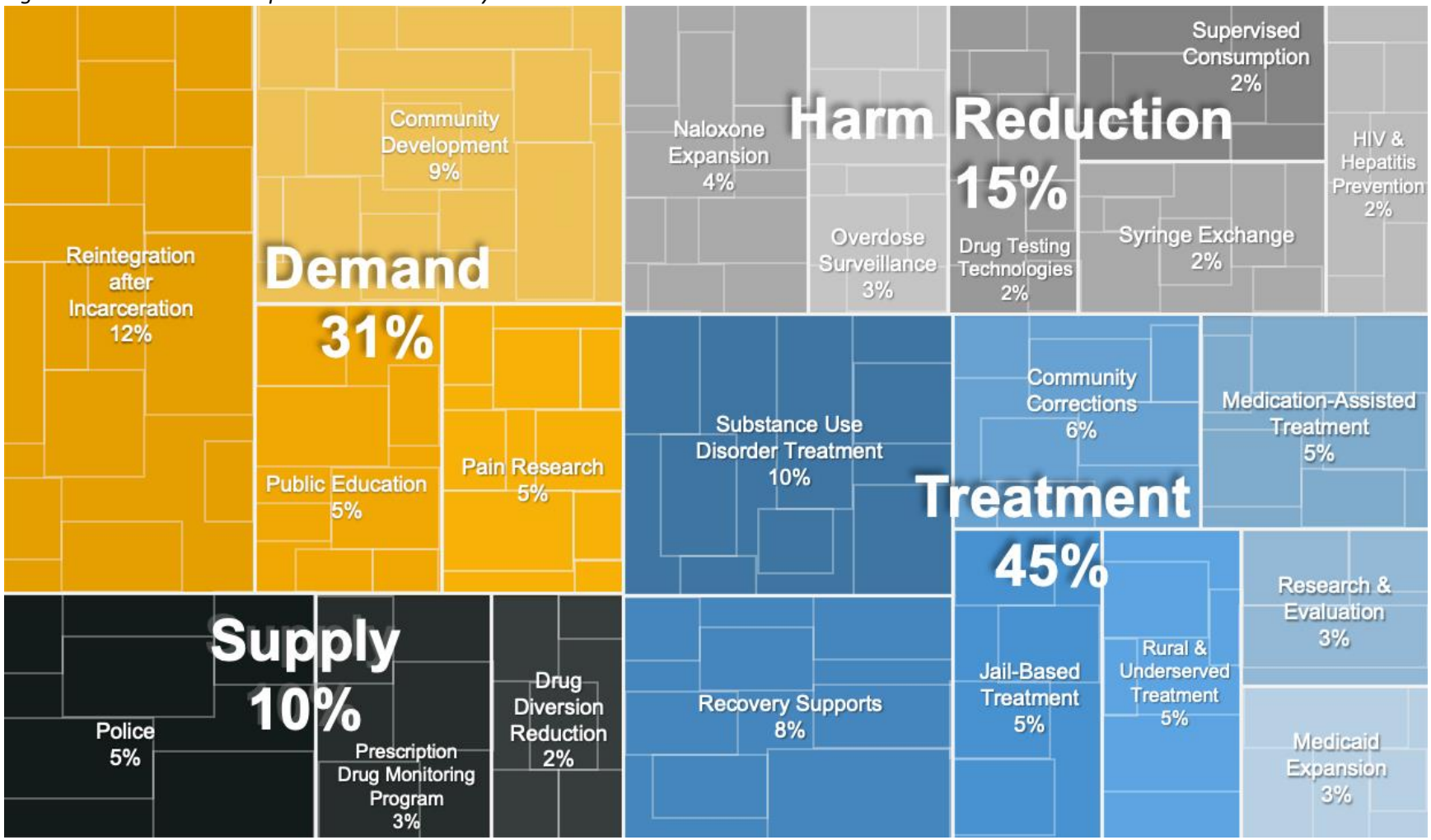
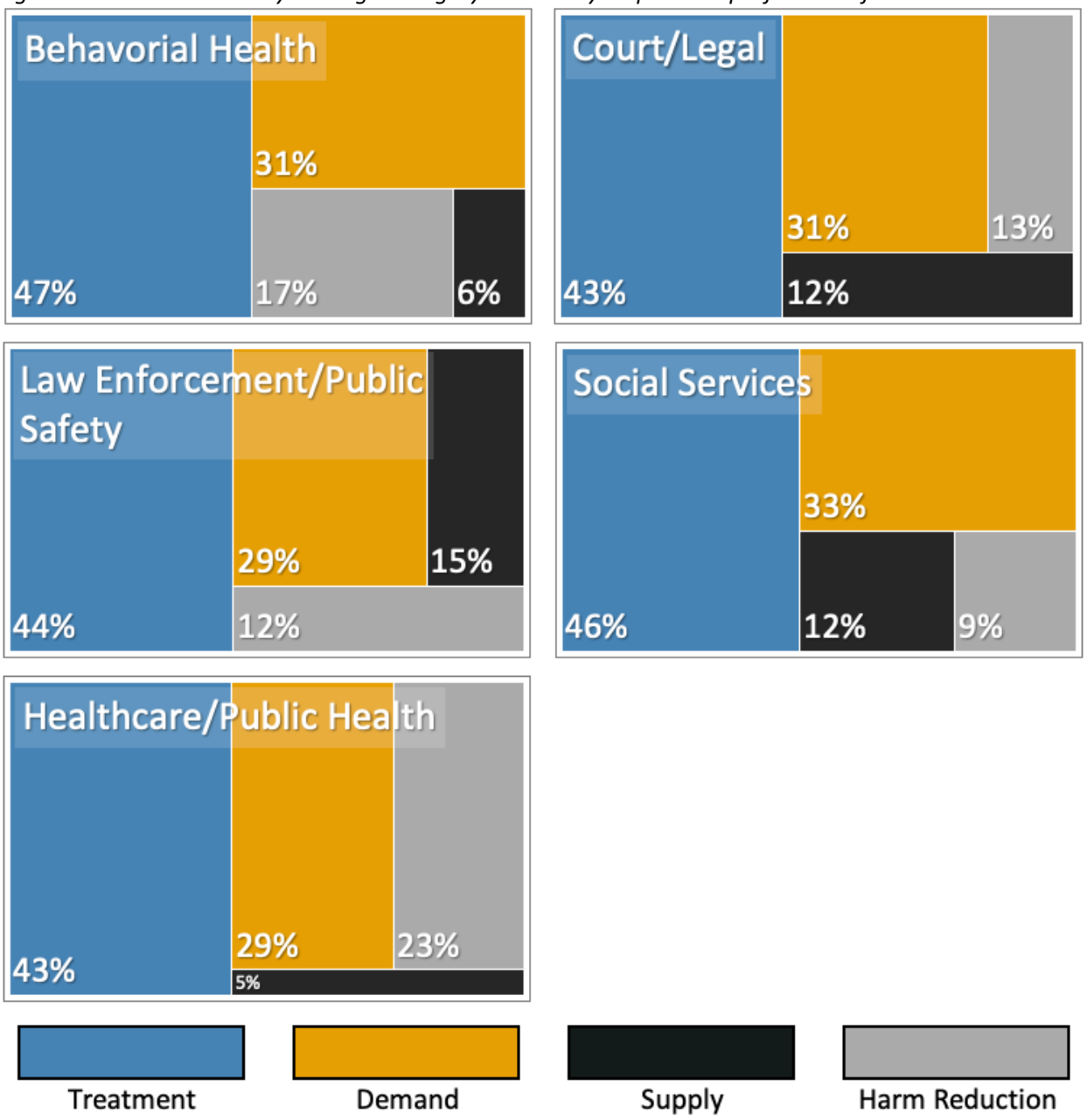
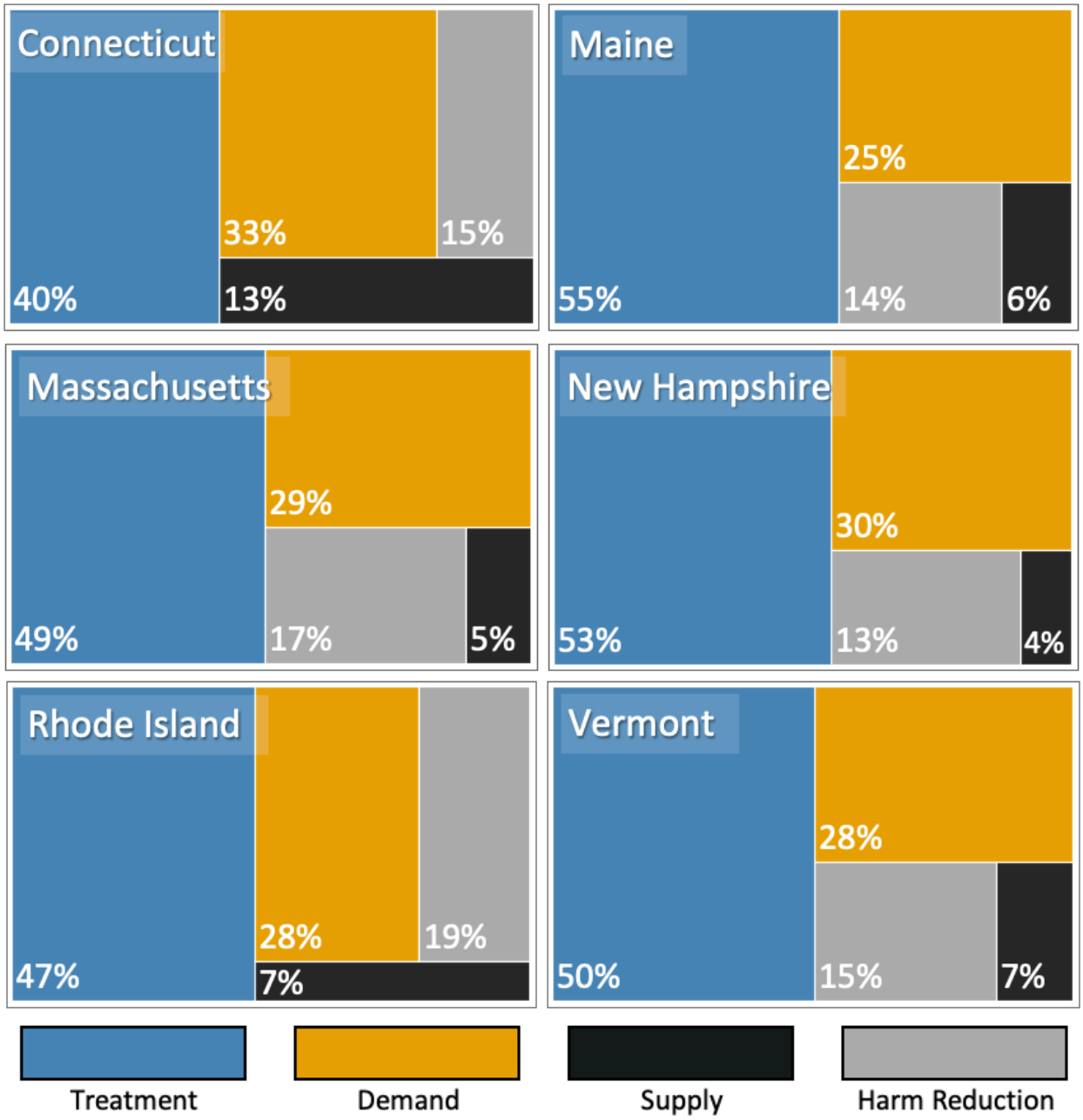


Figure 7: Funds allocated by strategic category and survey respondent professional field



When looking at allocation of funds by state, NE-RJOI states show a clear preference for treatment services over other strategic categories, followed by demand reduction/prevention, harm reduction and supply reduction. Figure 8 displays the average proportion of the budget allocated by strategic category in each state. While allocation patterns are similar for all states, there is some variation in the average amount of dollars spent in each category.

Figure 8: Funds allocated by strategic category and survey respondent state



CONCLUSIONS

Analysis of the NE-RJOI data visualization tool show that this region experiences higher overdose mortality rates than other regions of the country. Further, overdose hotspots are most prominent in Maine along the Atlantic coast and along state lines—especially the southern-most counties in the region. The location of overdose hotspots suggests that strong interstate coordination is necessary to curb overdose mortality in the NE-RJOI region. Complementary to overdose measures, the visualization provides county-level data that sheds light on unique conditions of the crisis in each community. Data show that counties located in metropolitan areas have higher average rates of overdose mortality, compared to their nonmetropolitan counterparts. That is, NE-RJOI counties located in more populous, urban areas face higher mortality rates. Despite federal efforts to reduce the availability of opioids, data show that many NE-RJOI counties still experience high prescribing rates. Similarly, analysis of data within the visualization tool shows that several counties do not have an opioid treatment program, a crucial resource in recovery from opioid use disorder. NE-RJOI counties with relatively high rates of confinement are also counties with high overdose mortality rates, suggesting an interplay between incarceration and fatal drug overdoses. Finally, many counties with high community distress and social vulnerability experience high rates of overdose mortality. These counties may be more likely, now and in the future, to realize adverse outcomes related to the overdose crisis.

The opioid allocation survey provides indication of stakeholder preferences for addressing the opioid epidemic in the New England states. Survey respondents chose to allocate the largest proportion of funds toward substance use treatment strategies, reflecting the urgent need to address the relatively high rates of overdose mortality demonstrated in the visualization tool. In terms of specific strategies, there was a clear preference for allocating funds toward reintegration of persons leaving incarceration – this preference is on par with the finding that high rates of confinement are correlated with high rates of overdose mortality in NE-RJOI counties.

The NE-RJOI data visualization tool coupled with allocation preferences indicated in the survey results can be used to further inform conversations about potential state and regional actions toward combatting the overdose crisis. In considering action steps, stakeholders should refer to programs, policies and initiatives with an evidence base and incorporate continuous evaluation strategies to understand what works and what does not in terms of reducing the rate of nonfatal and fatal overdose. A scoping review of studies evaluating federal and state opioid policies since 2005 documents the evidence for a variety of policy options (38), but concludes that rigorous evaluation is still imperative for identifying policies effective in reducing opioid-related harms and detecting unintended consequences.

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