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POLICE USE OF DISCRETION IN ENCOUNTERS WITH PEOPLE WITH OPIOID USE DISORDER: A STUDY OF ILLINOIS POLICE OFFICERS

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Abstract: Police frequently encounter people with opioid use disorder (OUD), having a profound effect on their risk environment and health outcomes. Officers retain significant discretionary authority in their response to these encounters. To explore the factors that underlie these decisions, we surveyed a sample of Illinois police officers. We administered an online survey to Illinois police departments using a random sampling strategy, stratified by agency size and the rurality of their service areas. Our final sample was 248 police officers from 27 departments. We surveyed officers' beliefs about 1) influences and control over their decision making; 2) the approval of other actors in making referrals to treatment for addiction, and 3) the potential impacts of medication-assisted treatment (MAT). We analyzed the survey data using descriptive statistics and regression analyses. Most officers were highly influenced by the expectations of their supervisors when responding to subjects who appeared to have an OUD, and about half would take direction from addiction treatment providers. Police in urban departments perceived greater support for MAT and were more likely to believe MAT could reduce the need for future arrests. Our findings suggest ways police officers can be influenced to make discretionary decisions that improve the health outcomes of their encounters with people with OUD: 1) Supervisors should serve as champions to promote referrals to treatment for substance use disorders; 2) Collaboration between law enforcement and community addiction treatment providers should be strengthened, and 3) MAT should be supported and expanded in rural areas.

Introduction

America is facing a substance use disorder (SUD) crisis; over 800,000 people have died of drug overdose since 1999.[1] The recent rate and volume of overdose deaths have broken all historical records,[2] and estimates suggest 6-7 million people struggle with SUD.[3] Working in the midst of this crisis, police officers frequently encounter people who use drugs (PWUD) due to the criminalized behaviors associated with substance use, including drug and syringe possession, and subsistence crimes such as theft, burglary, and sex work.[4] In 2019, U.S. police officers had 61.5 million citizen contacts[5] and made 1.63 million arrests for drug-related offenses, a majority of which were low-level misdemeanors.[6] These frequent interactions profoundly shape the risk environment of PWUD,[7] exposing them to increased risk of overdose and other sequelae of justice involvement, but can have different outcomes based on how officers use their discretion in making decisions about how to resolve these encounters, sometimes providing critical linkages to treatment and harm reduction resources. In keeping with the general powers accorded to police,[8] officers have considerable discretion in handling suspected drug activity (including naloxone an overdose reverse drug), including whether to make arrest or not,[9] or to refer suspects to addiction treatment and harm reduction resources.[10]

Influences on Decision Making

Officer use of discretion may be influenced by many factors,[11] including the characteristics of a suspect,[12] the nature of the offense,[13] and the suspect's demeanor (e.g., hostility, disrespect).[14] For those suspected of a drug crime,[15] found the prevailing neighborhood conditions and a suspect's perceived suspicious demeanor increased the likelihood of being stopped by police. A survey of officers found that they held punitive responses based on the drug type with harsher views toward drugs other than marijuana.[16]

Police officer characteristics and views may also influence their decisions around discretion. One study found younger officers and those assigned to patrol were more likely to hold punitive "get tough" attitudes. Officers who were non-white and held supervisory ranks were less likely to hold punitive views, and more likely to characterize punitive responses to drug use as counterproductive.[17] Officers, like the public at large, may also hold stigmatizing views towards PWUD that influence their decisions, such as blaming them for their own condition,[18] believing they are dangerous,[19] and viewing them as untrustworthy.[20] Research has shown that generally, police officers favor punitive responses to illicit substance use over a public health approach.[21]

Police culture can have a large impact on an officer's use of discretion, particularly influencing officer decisions regarding PWUD. For example, police culture may favor the well-entrenched approach of arrests rather than referrals to treatment, which can be perceived as social work rather than an acceptable form of policing.[22] To employ the most effective evidence-based responses to the overdose crisis, police departments will need to embrace a paradigm shift by considering public health outcomes in addition to public safety outcomes in their responses to drug use, addiction, and overdose, while understanding that there is nothing inherently effective about arrests when it comes to criminal behaviors motivated by addiction.[23]

Impact of the Use of Discretion by Police

The discretionary decisions police officers make can impact a person's life trajectory in both short- and long-term ways, especially if they are members of a vulnerable population. Police contact, even without an arrest, can be stressful and emotionally traumatic, especially for people of color and young adults.[24] Arrest, even without conviction, can disrupt education,[25] employment,[26] and stable housing.[27] In addition, those who are arrested have increased odds of rearrest, even when controlling for other variables.[28] For suspects with SUDs, even short or temporary periods of incarceration can result in acute, and potentially fatal, withdrawal symptoms.[29]

Research suggests that involvement in the justice system interferes with treatment through a variety of mechanisms.[30] Prisoners with an OUD will typically not receive effective, medication-assisted treatment (MAT) while they are in custody,[31] and incarcerated individuals receiving treatment for such disorders are often forced into painful states of withdrawal, which reduces the likelihood that a person will reenter treatment on release.[32] Opioid relapse and overdose deaths occur at high rates post-incarceration.[33] For those with OUD, after a period of abstinence, the risk of fatal overdose is heightened due to a reduced but uncertain drug tolerance.[34] In addition, there are limited opportunities for screening and treatment throughout the criminal justice system.[35]

However, police referrals to SUD treatment and harm reduction can be of benefit to people through increased use of pre-arrest practices commonly referred to as deflection and diversion.[36] Early interventions that provide people with medications for opioid use disorder (MOUD) can prevent the burdens and stigma of criminal prosecution while connecting people to potentially lifesaving treatment [37] that can reduce overdose [38] and recidivism.[39] The success of providing a linkage to MOUD, as an alternative to arrest, relies on decisions made by police officers and their leadership. First, decisions to advocate for and support such options, followed by a judicious balance of arrests and referrals to treatment based on the particular circumstances of each encounter. Despite the need to cultivate an evidence-based approach to use of discretion, i.e., one that recognizes the demonstrated effectiveness of MOUD as both a public safety and public health intervention, little has been studied about police use of discretion generally,[40] or decisions about diversion from arrest in particular.[41] To help address this, the present study examines the relationship between Illinois officers' decision making when encountering people contending with opioid use and addiction, and the officers' perceptions of control over how such encounters proceed and resolve. We also assess officers' sources of approval from others in decisions to refer a person to treatment or harm reduction services as an alternative to arrest, and the public safety impacts of linking people with opioid addiction to MOUD.

Methods

Participant Demographics

With the permission and assistance of each department's chief of police, the sample for this study included 248 police officers from 27 Illinois police departments. Departments who agreed to participate had a range of 2 to 298 full-time sworn officers (M = 13.57, SD = 85.5). Table 1 displays the demographics of respondents. A majority were white, male, had earned a bachelor's degree or higher, and had worked eight or more years in policing. About half of the sample were at the entry-level rank of police officer, and over half were assigned to patrol functions.

We obtained a 41.7% participation rate among targeted agencies as we attempted to recruit 48 departments and 20 agreed to participate. Participation from each agency varied from over half of officers (55.6%) to less than 1% (0.03%) (M = 24.4%). We cannot say with certainty how many officers were provided the opportunity to take the survey by their department's leadership, but our recruitment process provided assenting chiefs with a standardized script eliciting voluntary participation and a request to provide all officers with a link to the online survey. The rate of police participation in survey research varies widely,[42] but participation in this study exceeds that of prior statewide published studies of police stigma toward PWUD.[43]

Table 1
Demographics of Respondents

	n	%
Gender		
Female	31	12.5
Male	209	84.3
Other/ prefer not to say	8	3.2
Race/ethnicity		
Asian	2	0.8
Black	13	5.2
Latinx	10	4.0
White	205	82.7
Other or multiple race/ethnicity	16	6.5
Unknown	2	0.8
Highest level of education		
High school	5	2.0
Some college	35	14.1
Associate degree	30	12.1
Bachelor's degree	150	60.5
Master's degree or higher	28	11.3
Rank		
Captain/equivalent or above	16	6.5
Lieutenant	10	4.0
Sergeant	42	16.9
Detective	46	18.6
Police officer	126	50.8

Non-sworn employee	7	2.8
Unknown	1	0.4
Years in policing		
0-3 years (new)	24	9.7
4-7 years (early career)	32	12.9
8-15 years (mid-career)	52	21.0
16-25 years (senior)	100	40.3
More than 25 years	40	16.1
Primary policing position		
Administration	22	8.9
Community affairs/outreach	14	5.6
Detective (investigatory)	45	18.1
Narcotics	11	4.4
Patrol	137	55.2
Other/unknown	19	7.7
Career overdose response		
0-5	31	12.5
6-10	39	15.7
11-25	58	23.4
26-50	45	18.1
>50	75	30.2
Someone you care about is/was addicted to opioids		
Yes	72	29.0
No	146	58.9
Don't know	30	12.1
Someone you care about died of opioid overdose		
Yes	34	13.7
No	214	86.3

Note. Sample size was 248. Percentages may not equal 100% due to rounding. Race and gender were self-identified.

Measures

There is presently no set of validated items specifically designed to measure police discretion and decision making when encountering PWUD. However, we did build our survey instrument by modifying items developed and utilized by Compton et al. (2021) in their study of what influences an officer's intention to refer a person suffering from a mental illness to psychiatric treatment as an alternative to arrest.[44] Using established methods to operationalize the theory of planned behavior in a given context,[45] Compton and colleagues derived survey items from interviews of 26 police officers and two people with lived experience, then administered the resulting survey to 581 police officers. Analysis confirmed that the constructs measured by the items comported with the data.[46] We maintained the psychometric aspects of our selected items while adapting them to the topic of substance use.

Added to these measures were three original sets of ranked choice questions about what people, situational factors, and values influenced officers, and general questions about an officer's perceived control over making arrests, both of which had been employed in a previous study of 259 police officers in Indiana, Massachusetts, and Missouri.[47] These items were based on one author's 23 years of experience as a sworn police officer in two jurisdictions. Finally, we developed five measures of police discretion and decision making in encounters with people with OUD. These measures included what, and whom, influences discretionary decisions, external approval and potential impact of MAT,[48] and perceived control over decision making.

Whom Influences Officer Discretionary Decisions

The survey asked respondents to rate their level of agreement with "I usually do what (certain individuals or groups) think I should do." Answers included their supervisor, co-workers/patrol partners, family members, friends or neighbors; senior officers; addiction treatment professionals; the general public. Response choices were on a 6-point Likert scale from Strongly disagree = 1 to Strongly agree = 6.

Ranking What Influences Officer Discretionary Decisions

We provided items that may influence discretionary officer decision making and asked respondents to rank them. The survey asked, "When you have the discretion to make an arrest for a nonviolent misdemeanor or violation, please rank the following in the order in which they influence your decision" from 1 = Most to 4 = Least. There were two groups of items to rank from 1 to 4. The first group of items was: seriousness of offense; if effective alternatives exist; the need for consequences; and arrests should be made when laws are broken. The second group of items was attitude of the suspect; personal sense of right and wrong; suspect hasn't learned their lesson yet; and personal factors (overtime/work schedule).

In addition, we asked respondents to rank the influence of expectations on their discretion from different individuals and groups. The survey asked, "When you have the discretion to make an arrest for a nonviolent misdemeanor or violation, please rank the following in the order in which they influence your decision," from 1 = most, 5 = least. The choices were: friends and family; chief/agency head; supervisor(s); and colleagues/peers; and community.

Police Officer Responses on Likelihood Others Would Approve of Referrals to MAT

The survey asked, "for a hypothetical nonviolent misdemeanor or violation, please indicate the likelihood of the situation described in each statement." The response choices were a 6-point Likert scale of 1 = Extremely unlikely; 2 = Unlikely; 3 = Somewhat unlikely; 4 = Somewhat likely, 5 = Likely, and 6 = Extremely likely. Statements asked the likelihood that certain individuals and groups "would approve of me referring a subject who appears to have an opioid addiction to medication-assisted treatment as an alternative to arrest." The individuals and groups included supervisor, co-workers, family members, friends or neighbors, addiction treatment professionals, patrol partners, the general public, and people important to me.

Police Officer Responses on Impact of Referrals to MAT

The survey asked respondents three questions about "referring a subject who appears to have an opioid addiction to medication-assisted treatment." It asked if a referral 1) decreases his/her likelihood of having repeated contact with the police, 2) increases his/her trust in the police, since they are getting the help they need, and 3) helps reduce future arrests. The response choices were a 6-point Likert scale of 1 = Extremely unlikely; 2 = Unlikely; 3 = Somewhat unlikely; 4 = Somewhat likely, 5 = Likely, and 6 = Extremely likely.

Police Officer Responses on Control Over Decision Making

We asked respondents to indicate their level of control of decision making on two survey items on a scale of 1 = "Not under my control at all" to 6 = "Under my control." Two survey items had respondents rank the following: "whether or not I arrest a suspect for a non-violent offense" and "whether or not I confiscate items such as syringes, naloxone, or unprescribed addiction medication."

Procedure

To ensure specific subtypes of police departments would be adequately represented in our analytic sample, we employed a stratified sampling strategy. We created strata categorized by rurality (urban or rural), and by department size based on the number of full-time sworn officers (small, medium, and large) (Table 2). We designated police departments as rural or urban based on the county-level classifications utilized by the U.S. Census Bureau. Police department headcounts were ascertained from Illinois State Police records. Rural/small police departments had less than 15 full-time sworn officers; rural/large police departments had 15 or more officers; urban/small police departments had 1-100 officers; urban/medium police departments had 101-249 officers; and urban/large police departments had more than 250 officers. We excluded state police, county sheriffs, college/university police, park/forest preserve police, and railroad police departments due to the heterogeneity of their roles, which would reduce the generalizability of some findings.

Table 2

Police Department Survey Participation by Strata

Police department strata	Departments In the state	Police departments recruited	Police departments in study	Police departments not in study	Participation rate	Officer sample
					%	*n*
Rural, small	85	20	5	15	25.0	14
Rural, large	11	5	0	5	0.0	0
Urban, small	340	8	5	3	62.5	33
Urban, medium	19	10	6	4	60.0	98
Urban, large	8	5	4	1	80.0	54
Unknown strata		--	--	--	--	49
Total	463	48	20	28	41.7	248

Note: The police departments "not in study" include those who did not respond to recruitment efforts or who were contacted but declined to participate. The rural/urban designation was from 2010 U.S. Census

Bureau data and based on county of the police department. The department size was based on the number of full-time sworn officers from the Illinois State Police.

We emailed the police chiefs of randomly selected agencies to explain the purpose of our research, and to solicit their participation. If the chief agreed, we emailed them a brief study description to share with officers, and a link to the consent form and the survey. The survey was administered via Qualtrics, a web-based software suite for online surveys and data collection. If police chiefs did not respond to the initial email request to participate in our study, we would follow-up again by email or phone up to four times. The study was evaluated by the Illinois Criminal Justice Information and Lifespan IRBs and designated exempt.

Imputation of Police Department Location

Several respondents omitted the name of their police department. In 46 cases, we used geographic coordinates provided by the survey platform utilized for the study to surmise the municipality concerned. The platform uses survey respondents' Internet Protocol (IP) address to generate these coordinates, allowing us to impute jurisdiction based on the assumption respondents completed their surveys while at work.[49] A limitation to this approach is that while the supplied coordinates suggest the location where a respondent took the survey, they may not reflect their actual work location. However, we limited inclusion of such data to cases where geographic coordinates matched participating municipalities and were linked to the range of dates in which they did so. A total of 49 survey responses with omitted agencies did not have latitude and longitude provided by the online survey platform, so their police department, urban/rural designation, and department size could not be determined. Those cases were excluded from the corresponding analyses.

Analytic Strategy

We analyzed the resulting data using IBM SPSS 27 (Statistical Package for the Social Sciences)[50] using descriptive statistics and regression analyses. Given the paucity of data on the issues of this paper, we believe it is critical to start with a description of the data in this paper and understanding its basic patterns before presenting our regression models. For the regression analyses, we examined subscales and found that "influences on decision making," "others approval of MAT," and "impact of MAT" all had acceptable internal validity (Table 3). For these three constructs, we created three new indices in order to conduct linear regressions. Additionally, we investigated two additional questions on control over decision making using ordinal regressions. For the three continuous dependent variables, we used Ordinary Least Square (OLS) regression.

We dichotomized each characteristic independent variable of officers including race (0=Other race, 1=White), education level (0=Less than bachelors, 1=Bachelors or greater), years in policing [0=early career (0-7 years), 1=late career (7 or more years)], rank at time of survey [0=non-supervisory (line officer or detective), 1=supervisory (sergeant, lieutenant, captain, or above)], number of fatal and nonfatal drug overdoses encountered in career [0=moderate [0-25 overdoses], 1=high [26 or more overdoses]), someone they care about is or was addicted to opioids (0=no, 1=yes), and someone they cared about died of an opioid overdose (0=no, 1=yes). We categorized department size as small (0-100 officers), medium (101-249 officers), and large

(250 or more officers). In order to run regressions, we then dichotomized department size as 1 = small and 0 = medium/large as well as 1 = medium and 0 = small/large.

Table 3

Subscales on Decision Making and Views of Medication Assisted Treatment

Subscale	Number of items	*n*	*M*	*SD*	Cronbach's α
Influences on decision making	7	221	24.16	7.095	.894
Control over decision making	2	196	8.06	1.840	.602
Others approval of MAT	8	242	34.37	7.687	.911
Impact of MAT	3	244	9.93	3.628	.874

Note. Sample size was 248.

Results

Influences on Officer Decision Making

Who Influences Officers?

A majority of police officers at least "somewhat agreed" that they take direction from their supervisors in responding to subjects who appeared to have an opioid addiction (73%) (Table 4). About half of the officers would take direction from co-workers (51.6%), and senior officers (49.6%), or addiction treatment providers (49.5%). Most indicated they do not take direction from the public, friends/neighbors, or family members.

Table 4

Officer Responses About Whom Influences Their Discretionary Decisions

Survey items	Strongly disagree		Disagree		Somewhat disagree		Somewhat agree		Agree		Strongly agree	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
1. Supervisor	5	2.0	20	8.1	17	6.9	68	27.4	91	36.7	22	8.9
2. Co-workers/patrol partners	13	5.2	49	19.8	33	13.3	67	27.0	56	22.6	5	2.0
3. Family members	19	7.7	66	26.6	40	16.1	54	21.8	35	14.1	8	3.2
4. Friends or neighbors	21	8.5	71	28.6	45	18.1	45	18.1	34	13.7	6	2.4
5. Senior officers	15	6.0	52	21.0	32	12.9	68	27.4	49	19.8	6	2.4
6. Addiction treatment professionals	10	4.0	46	18.5	42	16.9	76	30.6	39	15.7	8	3.2
7. The general public	26	10.5	66	26.6	37	14.9	57	13.0	29	11.7	7	2.8

Note. Sample size was 223 for items 1 and 2, 222 for items 3, 4, 5, and 7, and 221 for item 6. Respondents were asked to indicate their level of agreement about whom they usually take direction when dealing with subjects who appear to have an opioid addiction: "When dealing with subjects who appear to have an opioid addiction, I usually do what my [e.g., supervisor] thinks I should do."

Linear regression analyses examined differences in officer demographics and responses on whom influences their discretionary decisions (Table 5). Results indicated officers who work in small departments (0-100 officers) were more likely to agree that others influenced their decision making when dealing with those with an opioid addiction ($\beta = .256$, $p = .022$). We also found that

officers who have responded to a larger number of overdoses in their career were more likely to agree that others influence their decisions than officers who responded to fewer overdoses (β = .203, p = .026).

Table 5

OLS Regression Results of Officer Demographics and Influences on Decision Making

	Influences on decision making				
Demographics	B	β	*SE*	95% CI	
				LL	*UL*
Gender (1=male)	-.053	-.017	.257	-.560	.454
Race (1=White)	-.319	-.118	.216	-.746	.108
Education (1=Bachelors or higher)	.315	.141	.196	-.071	.701
Rank (1=Supervisory)	.119	.055	.189	-.255	.493
Years in policing (1=8 or more years)	-.196	-.080	.207	-.604	.213
Department rurality (1=urban)	.015	.004	.371	-.719	.749
Department size					
Small (1=Small)	.589*	.256	.255	.805	1.093
Medium (1=Med)	.274	.137	.205	-.131	.678
Overdose responses (1=26 or more overdoses)	.406*	.203	.181	.049	.763
Someone you care about is/was addicted to opioids (1=yes)	-.305	-.145	.185	-.670	.060
Know died overdose (1=yes)	.102	.032	.271	-.433	.638

Note. Sample size was 160. CI = confidence interval; *LL* = lower limit; *UL* = upper limit. $^{*}p < .05$. $^{**}p < .01$.

What Influences Officers?

Police officers were asked to rank the order in which a given set of factors influenced their decision to make an arrest for a nonviolent misdemeanor or violation (Table 6). In terms of the values invoked, seriousness of the offense was ranked most influential; of specific situational factors, the highest ranked influence was attitude of suspect followed closely by the officer's sense of right and wrong; in the final list, which concerned the influence of others, the main influence was the expectations of friends and family.

Table 6

Officer Ranking of Influences on Police Decision Making

Survey item	Rank	Rank Weighted *M*	4th *n*	4th %	3rd *n*	3rd %	2nd *n*	2nd %	1st *n*	1st %
Seriousness of offense	1	175.5	3	1.2	5	2.0	23	9.3	155	62.5
If effective alternatives exist	2	111.5	44	17.7	36	14.5	94	37.9	12	4.8
The need for consequences	3	96.3	42	16.9	94	37.9	45	18.1	5	2.0
Arrests should be made when laws are broken	4	81.8	97	39.1	51	20.6	24	9.7	14	5.6
Attitude of the suspect	1	153.3	7	2.8	26	10.5	74	29.8	83	33.5
Personal sense of right and wrong	2	152.3	7	2.8	34	13.7	62	25.0	87	35.1
Suspect hasn't learned their lesson yet	3	105	38	15.3	89	35.9	48	19.4	15	6.0
Personal factors (overtime/work schedule)	4	64.5	138	55.6	41	16.5	6	2.4	5	2.0

Expectations of…	Rank	Rank Weighted *M*	5th *n*	5th %	4th *n*	4th %	3rd *n*	3rd %	2nd *n*	2nd %	1st *N*	1st %
Friends and family	1	70.9	126	50.8	45	18.1	10	4.0	11	4.4	3	1.2
Chief/agency head	2	58.2	17	6.9	13	5.2	36	14.5	51	20.6	78	31.5
Supervisor(s)	3	55.8	1	0.4	6	2.4	33	13.3	97	39.1	58	23.4
Colleagues/peers	4	38.2	19	7.7	67	21.0	66	26.6	26	10.5	17	6.9
Community	5	27.2	32	12.9	64	25.8	50	20.2	10	4.0	39	15.7

Note: Sample size for items 1-4 was 186; items 5-8 was 190; and 9-13 was 195. Respondents were asked to rank the order of influence on decisions to arrest for nonviolent misdemeanors or violations. Weights for means for rankings of four choices were Most = 4, A fair amount = 3, A small amount = 2, Least = 1. Weights for means for items 9-13 were Most = 5, A good amount = 4, A fair amount = 3, A small amount = 2, Least = 1.

Approval from Others to Help Persons with OUD

A majority of respondents indicated they were at least "somewhat likely" to have approval from others if referring a person with an opioid addiction to MAT regardless of the other group concerned (Table 7). MAT is the treatment of persons with OUDs using the FDA-approved medications of methadone, buprenorphine, or naltrexone,[51] an intervention proven effective at saving lives from addiction and overdose.[52] A large majority thought it was "somewhat likely" to "extremely likely" that addiction treatment specialists (89.6%), the general public (81.9%), and family members (80.3%) would be supportive of MAT referrals. Although still a majority, a

smaller percentage of officers reported their supervisors (76.3%), co-workers (69.8%), and patrol partners (68.2%) would approve of referrals to MAT.

Table 7

Police Officer Responses on Likelihood Others Would Approve of Referrals to MAT

Survey items	Extremely unlikely		Unlikely		Somewhat unlikely		Somewhat likely		Likely		Extremely likely	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Supervisor	10	4.0	23	9.3	23	9.3	78	31.5	83	33.5	28	11.3
Co-workers	13	5.2	22	8.9	37	14.9	85	34.3	66	26.6	22	8.9
Family members	7	2.8	17	6.9	21	8.5	61	24.6	90	36.3	48	19.4
Friends or neighbors	7	2.8	20	8.1	23	9.3	72	29.0	85	34.3	37	14.9
Addiction treatment professionals	2	0.8	4	1.6	18	7.3	41	16.5	88	35.5	92	37.6
Patrol partners	11	4.4	24	9.7	39	15.7	92	37.1	59	23.8	18	7.3
The general public	2	0.8	21	8.5	19	7.7	89	35.9	83	33.5	31	12.5
People important to me	6	2.4	20	8.1	23	9.3	77	31.0	79	31.9	40	16.1

Note. Sample size was 245, except for items "family members" and "friends or neighbors," was 244, and "patrol partners," was 243. Respondents were asked to indicate the likelihood of approval for their referral to MAT as an alternative to arrest for hypothetical nonviolent misdemeanors or violations.

We examined differences in officers' responses on others' approval of MAT by respondent characteristics (Table 8). Results of the linear regression showed White officers were less likely to indicate that others approve of referrals to MAT compared to non-white officers (β = -.209, *p* = .005). Officers working in urban departments were less likely to state that others approve of referrals to MAT (β = .209, *p* = .013) when compared to officers in rural departments. Lastly, officers from medium-sized departments were more likely to report that others approve of referrals to MAT (β = .348, *p* <.01) when compared to officers from small or large departments.

Table 8

OLS Regression Results of Officer Demographics and Others' Approval of Referrals to Medication Assisted Treatment

Demographics	Others' approval of referrals to MAT				
				95% CI	
	B	β	*SE*	*LL*	*UL*
Gender (1=male)	-.286	-.092	.231	-.743	.171
Race (1=White)	-.558**	-.209	.197	-.948	-.168
Education (1=Bachelors or higher)	-.165	-.077	.172	-.506	.175
Rank (1=Supervisory)	.155	.074	.164	-.169	.478
Years in policing (1=8 or more years)	-.189	-.081	.181	-.547	.168
Department rurality (1=urban)	.781*	.209	.310	.169	1.393
Department size					
Small (1=Small)	.430	.195	.226	-.017	.877
Medium (1=Med)	.672**	.348	.179	.319	1.026
Overdose responses (1=26 or more overdoses)	-.136	-.071	.160	-.452	.180

Someone you care about is/was addicted to opioids (1=yes)	.137	.068	.161	-.181	.455
Know died overdose (1=yes)	-.149	-.048	.243	-.629	.331

Note. Sample size was 168. CI = confidence interval; *LL* = lower limit; *UL* = upper limit. $^{*}p < .05$. $^{**}p < .01$.

Impact of Referrals to MAT

A majority of police officers (54%) indicated it was at least "somewhat likely" that referrals to MAT increased trust in police (Table 9). However, slightly less than half of respondents thought it likely that referrals would decrease police contact (47.1%) or reduce future arrest (46.7%).

Table 9

Police Officer Responses on Impact of Referrals to MAT

Survey item	Extremely unlikely		Unlikely		Somewhat unlikely		Somewhat likely		Likely		Extremely likely	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Decreases repeated contact with the police	24	9.7	66	26.6	37	14.9	70	28.2	38	15.3	9	3.6
Increases his/her trust in police, since they are getting the help they need	24	9.7	52	21.0	35	14.1	75	30.2	42	16.9	17	6.9
Reduces future arrests	23	9.3	58	23.4	48	19.4	77	31.0	32	12.9	7	2.8

Note. Sample size was 244 for item "decreases repeated contact," and 245 for the other two items. Respondents were asked to indicate the likelihood of impacts of referrals to MAT for a subject who appears to have an opioid addiction.

We conducted regression analyses to examine the relationship between officer characteristics and their responses on the impact of referrals to MAT (Table 10). Results indicated that officers working in urban departments were more likely to report that the impact of referrals to MAT was beneficial (β = .285 p = .001) when compared to officers in rural departments. Additionally, officers working in smaller departments were more likely to respond that there was a positive impact of referrals to MAT compared to officers in medium or large departments (β = .275, p = .011).

Table 10

OLS Regression Results of Officer Demographics and Impact of Medication Assisted Treatment

Demographics	Impact of MAT				
				95% CI	
	B	β	*SE*	*LL*	*UL*
Gender (1=male)	-.157	-.040	.304	-.757	.444
Race (1=White)	-.347	-.105	.254	-.848	.154
Education (1=Bachelors or higher)	.079	.030	.225	-.365	.522
Rank (1=Supervisory)	.003	.001	.215	-.421	.428
Years in policing (1=8 or more years)	-.032	-.011	.235	-.497	.432
Department rurality (1=urban)	1.340**	.285	.408	.536	2.145
Department size					

Small (1=Small)	.763*	.275	.297	.177	1.349
Medium (1=Med)	-.052	-.022	.234	-.514	.410
Overdose responses (1=26 or more overdoses)	-.176	-.073	.209	-.588	.236
Someone you care about is/was addicted to opioids (1=yes)	.129	.051	.211	-.287	.545
Know died overdose (1=yes)	-.144	-.038	.312	-.760	.472

Note. Sample size was 171. CI = confidence interval; *LL* = lower limit; *UL* = upper limit. $^{*}p < .05$. $^{**}p < .01$.

Officer Discretion: Control Over Decision Making

Officers were asked about their personal discretionary control over making an arrest for a non-violent misdemeanor or confiscating drug-related items (Table 11). Just under half of respondents indicated they had at least some control over making arrests (47.1%) and confiscating drug-related items (46.7%).

Table 11

Police Officer Responses on Control Over Decision Making

Survey item	Entirely not under my control		Not under my control		Somewhat not under my control		Somewhat under my control		Under my control		Entirely under my control	
Whether or not I…	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Arrest a suspect for a non-violent misdemeanor.	24	9.7	66	26.6	37	14.9	70	28.2	38	15.3	9	3.6
	Not up to me at all		Not up to me		Somewhat not up to me		Somewhat up to me		Up to me		Entirely up to me	
Confiscate items such as syringes, naloxone, or unprescribed addiction medication.	23	9.3	58	23.4	48	19.4	77	31.0	32	12.9	7	2.8

Note. Sample size was 219 for item “arrest” and 199 for ”confiscate.”

Ordinal regression analyses were performed to evaluate differences in officer responses on control over decision making items by respondent demographics (Table 12). We found that officers with a bachelor’s degree or higher were 61% less likely to report that it is not entirely under their control to arrest a suspect for a non-violent misdemeanor ($X^2 = 6.259$, $p = .012$), compared to officers less than a bachelor’s degree. Officers in supervisory roles were 68.4% less likely to indicate that a non-violent misdemeanor arrest is under their control ($X^2 = 9.676$, $p = .002$), compared to officers in a non-supervisory role. Finally, officers working in medium-sized departments were 130.6% more likely to respond that arresting a suspect for a non-violent misdemeanor is entirely under their control ($X^2 = 4.566$, $p = .033$) then officers in small or large departments.

Officers in urban departments were 12.3 times more likely to report that confiscating items (e.g., syringes, naloxone) was entirely up to them ($X^2 = 9.509$, $p = .002$), compared to officers in rural departments.

Table 12

Ordinal Regression Results of Officer Responses on Control Over Decision Making

	Arrest – non-violent misdemeanor			Confiscate – Unprescribed meds, syringes, naloxone		
Demographics	Odds ratios	95% CI		Odds ratios	95% CI	
		LL	*UL*		*LL*	*UL*
Gender (1=male)	.530	.203	1.381	.392	.144	1.070
Race (1=White)	.480	.212	1.086	1.124	.495	2.555
Education (1=Bachelors or higher)	.390*	.186	.815	.702	.328	1.506
Rank (1=Supervisory)	.316**	.153	.653	.630	.304	1.304
Years in policing (1=8 or more years)	.794	.371	1.700	1.208	.558	2.615
Department rurality (1=urban)	2.613	.652	10.471	13.304**	2.568	68.924
Department size						
Small (1=Small)	.746	.284	1.959	.442	.158	1.126
Medium (1=Med)	2.306*	1.072	4.964	1.199	.555	2.589
Overdose responses (1=26 or more overdoses)	.874	.445	1.718	.741	.368	1.494
Someone you care about is/was addicted to opioids (1=yes)	1.495	.753	2.967	1.266	.629	2.547
Know died overdose (1=yes)	.565	.210	1.521	.901	.328	2.475

Note. Sample size was 248. CI = confidence interval; *LL* = lower limit; *UL* = upper limit. $^{*}p < .05$. $^{**}p < .01$.

Discussion

Influences on Decision Making

We examined influences on police officer discretionary decision making when responding to subjects who presented as having opioid use disorder. We found that officers from small departments and those who responded to a high number of overdoses agreed that others' (e.g., supervisors, friends/family) influenced their decision making when dealing with subjects who appear to have an opioid addiction. Within the police department, a majority of police officers indicated they were strongly influenced by their supervisors, and would be likely to take direction from them, when handling situations related to drug use and addiction, which is supported by the findings of a prior study.[53] This suggests supervisors can serve as effective advocates for police deflection programs which refer citizens to SUD treatment as an alternative to arrest.[54] While a relatively new practice, police deflection programs hold the promise of linking people with substance use disorders to effective treatment while avoiding the disruptions of arrest.[55] Support from leadership is a key tenet of the success and sustainability of these programs, as leaders are empowered to communicate critical information about these programs

and their benefits to officers and stakeholders.[56] One study found when police chiefs and senior officers were sufficiently invested in promoting a public health approach to substance use, there was more successful implementation and buy-in for deflection programs among the rank and file.[57]

As individuals working outside of a police department, addiction treatment providers held a notable influence over an officer's response to people with OUD. About half of officers reported they would take direction on how they would handle subjects who appear to have OUD from such providers, while about half of the respondents would not. Police officers often encounter individuals with an SUD, so trust and collaboration with health care providers is essential if the goal is to improve the health outcomes of justice involvement.[58] In addition, police deflection programs rely on such trust and collaboration to succeed. It is therefore concerning that many officers in our sample report the limited influenced of these experts in addiction treatment. This trustworthiness gap is not unique to policing, however; it has also been observed among officials in drug court settings.[59] This suggests the need for further training, collaboration and coordination of effort between the police and community treatment providers.

Officers ranked seriousness of the offense and attitude of the suspect as most influential over their decisions to make an arrest for a nonviolent misdemeanor or violation. Prior research supports that seriousness of an offense[60] and suspect attitude[61] influence officer decisions, suggesting the need for a more explicit understanding of how both changes in law and direction from supervisors can change an officer's perception of the seriousness of an alleged crime. It is also critical to note that an officer's perceived attitude of a suspect is likely informed by stigma and stereotypes, so further research is required to understand how to mitigate these sources of bias in an officer's decision making.[62]

Control over Decision Making

With about half of officer respondents indicating they had at least some discretionary control over making arrests and confiscating drug-related items, a more formal approach to empowering officers to use their discretionary judgment may be needed to advance police diversion strategies. This is the case especially considering officers routinely use their discretion in traffic enforcement settings and for other nonviolent infractions, so an explicit extension of this prerogative to drug enforcement may be necessary. Unsurprisingly, officers in higher ranks were more likely to report having control over making an arrest for a non-violent misdemeanor than officers in lower ranks. We can hypothesize that after promotion to a higher rank and the corresponding time on the force, supervisors felt more explicitly empowered to exercise discretion, and perceived a greater degree of autonomy in doing so. A prior study found rank was a strong predictor of officer views of police administration, citizens, and community policing.[63] In addition, urban departments were *significantly* more likely to report having control over their enforcement decision making and whether they confiscated drug-related items, which, which may be indicative of the more diffuse structure of urban police agencies, and the comparative anonymity officers may feel as they go about their work in highly-populated areas.

We found that officers with more education reported that it is entirely under their control to arrest a suspect for a non-violent misdemeanor compared to less educated officers. Prior research

has found differences among officers based on education. Officers with more education were less likely to use force,[64] abuse their authority,[65] engage in unethical behavior,[66] and engage in conduct that generated citizen complaints.[67] Policing diverse communities requires officers to be open to a wide range of views and opinions, including those of the public, a disposition which can be cultivated through a college education.[68] Yet, according to one study, less than 2% of U.S. police departments require a 4-year degree.[69] In addition to other broader benefits of having a better educated workforce, our study suggests that law enforcement agencies could make potentially greater progress on using alternatives to arrest for cases involving SUD if they had more college educated officers among their ranks.

Support for MAT

A large majority of officers thought addiction treatment specialists, the general public, and family members would be supportive of MAT referrals. Critically, this comports with a prior study of police in three states that administered the same set of items, and also demonstrated a significant association between these beliefs and officers' intentions to actively make such referrals.[70] This suggests that linkages to MAT in police settings would be well-received by officers under the belief they are widely supported interventions. Officers in urban police departments were more likely to indicate that others, such as supervisors, family, and general public, would approve of MAT, and that MAT was beneficial, than officers in rural agencies. There may be stronger stigma against PWUD in rural areas, resulting in less funding for treatment, suggesting an acute need to reduce community stigma, increase prescribers, and expand telehealth in rural areas.[71] It likewise appears more work will be needed to advance police diversion programs in rural areas, which may face additional challenges of feasibility given the logistical demands of these highly dispersed settings.

While just over two-thirds of officers reported their patrol partners or co-workers would approve of referrals to MAT, nearly one-third of officers reported co-workers would not approve. This is concerning because police culture can be a formidable barrier for gaining support among officers for direct linkage to treatment as an alternative to enforcement.[72] These results suggest the need to invest in recruitment, selection, and training to yield a cadre of officers with widespread support for linkage to MAT. Although the one-third of officers who felt colleagues would not support such linkages were in the minority, this may still be a critical mass capable of diminishing the acceptability of police deflection programs. Research that clarifies why officers think their colleagues would not approve of referrals can reveal important cultural perceptions about MAT among the broader police audience, and aid in the development of training and policies that correct misinformation, stereotypes, and stigma toward PWUD and MAT.

This study has limitations. While it uses a stratified sample that captures Illinois police departments of different sizes, it did not survey members of the Chicago Police Department. It is the state's largest agency, faces a considerable challenge with substance use, and has a unique and innovative citywide narcotics arrest diversion program that makes the referrals examined in this study.[73] Our study therefore provides results in an Illinois setting that do not incorporate this highly relevant agency, which merits extensive research on its own. The study also measures attitudes and beliefs that can be used to surmise behavioral intentions and suggest how to modify them, but it does not capture three critical things: actual reports of officer behavior, whether

officers have changed their behaviors over time based on shifts in their knowledge and beliefs, and how receptive they may be to changing their behaviors during encounters with people who use drugs. It does, however, offer results about what factors may influence the use of discretion as a form of police behavior, so the study provides data that may be used to design training, policies, and interventions that can alter officer behavior. In those cases, it is critical for the policies to offer concrete guidance and set clear behavioral expectations for officers, as is not always the case in related policies in Illinois.[74]

Lastly, while Illinois is a large state with considerable heterogeneity among its police departments and their constituencies, it is a single state. The results here complement those of other studies in states such as Missouri and Indiana, such as del Pozo et al. (2021),[75] but they may not provide practical guidance that is readily generalizable across other regions, states, and agencies. Future research should not only ascertain what influences officers' use of discretion, but the factors that may cause these influences to vary across settings.

Conclusion

Police officers will inevitably encounter PWUD in the community, many of whom would benefit from effective treatment and linkage to harm reduction, and officers have broad discretion to guide the outcomes of these encounters. It is therefore important to understand officer attitudes and beliefs about the relevant facts and circumstances of their encounters with people who have OUD, as well as what and who influences their decision-making regarding drug use and drug crime. We found most officers would take direction from their supervisors when handling subjects with opioid addiction. Particularly effective is when supervisors serve as supporters of a public health and public safety partnership that employs evidence-based treatment for SUDs. Since about half of the officers surveyed would take direction from addiction treatment providers, collaboration between police and treatment providers should be bolstered. Police in urban departments, rather than rural, felt there was approval for MAT, and believed it was beneficial. This indicates that more should be done in rural areas to expand, support, and fund MAT. As we come to a more nuanced understanding of the police use of discretion in encounters with PWUD, we will be able to design policies, systems and training that better aligns public safety and public health goals by guiding police to toward evidence-based decisions around diversion to treatment that can reduce the toll of addiction and overdose.

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