Action is Needed to Explore Ways to Offer an Evidence-Based Treatment for People Who Use Methamphetamine

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Action is Needed to Explore Ways to Offer an Evidence-Based Treatment for People Who Use Methamphetamine

Report Highlights

Background

Currently, there is no medication treatment for methamphetamine use disorder. Methamphetamine use can have severe health consequences for those who use it as well as implications and costs to society.

What We Found

This audit: 1) identifies reasons why government, including the City of Seattle, should act with urgency to provide evidence-based treatment for people who use methamphetamine; 2) provides an overview of Contingency Management, an evidence-based treatment that has been proven effective for people with methamphetamine use disorder; and 3) offers some possibilities for deploying Contingency Management in Seattle, including directly to the places where people with methamphetamine use disorder reside.

Since there is no U.S. Food and Drug Administration-approved pharmacological treatment for stimulant use disorder, practitioners must rely on behavioral interventions. Contingency Management is a behavioral intervention with the strongest research evidence for methamphetamine use disorder.[1] People undergoing Contingency Management receive rewards in exchange for specific behaviors (e.g., negative urine drug tests).

Recommendations

We recommend that government, including the City of Seattle, should act with urgency to address methamphetamine use disorder in non-clinical settings by exploring ways to scale up implementation of evidence-based treatment (i.e., Contingency Management) with innovations that reduce barriers to participation and with ongoing rigorous research to ensure that positive outcomes are achieved.

[1] See this 2020 systematic review of 27 studies of Contingency Management for methamphetamine use disorder (Brown & DeFulio, 2020) (https://www.sciencedirect.com/science/article/abs/pii/S0376871620304725?via%3Dihub) and this 2013 evaluation of Contingency Management (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4242089/) at a Seattle-based community mental health and addiction treatment agency (McDonell, et al., 2013).

WHY WE DID THIS AUDIT

This audit report grew out of work requested by Seattle City Councilmembers Andrew Lewis and Lisa Herbold; specifically our July 15, 2022 audit, The City of Seattle Should Use a Data Dashboard to Track its Progress in Addressing Unsanctioned Encampments, and our forthcoming audit regarding Organized Retail Crime fencing operations in Seattle.

HOW WE DID THIS AUDIT

To conduct this audit, our office worked with the Promoting Research Initiatives in Substance Use and Mental Health Collaborative (PRISM) at Washington State University. The PRISM Collaborative was established to address disparities in substance use disorder and mental health treatment.

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INTRODUCTION

Audit Overview

This audit report grew out of work requested by Seattle City Councilmembers Andrew Lewis and Lisa Herbold; specifically our July 15, 2022 audit, The City of Seattle Should Use a Data Dashboard to Track its Progress in Addressing Unsanctioned Encampments,[2] and our forthcoming audit regarding Organized Retail Crime fencing operations in Seattle.

This audit: 1) identifies reasons why government, including the City of Seattle, should act with urgency to provide evidence-based treatment for people who use methamphetamine; 2) provides an overview of Contingency Management, an evidence-based treatment that has been proven effective for people with methamphetamine use disorder; and 3) offers some possibilities for deploying Contingency Management in Seattle, including directly to the places where people with methamphetamine use disorder reside. Staff from the Office of Mayor Bruce Harrell reviewed earlier drafts of this report, and their comments have been incorporated in this final report.

Audit Background

Methamphetamine use disorder adversely affects the physical and mental health of individuals, and it also has negative impacts on society. Unfortunately, no pharmacological treatment for methamphetamine use disorder is approved by the U.S. Food and Drug Administration (FDA). Practitioners rely heavily on behavioral and psychosocial interventions in the absence of a pharmacological treatment for methamphetamine use disorder. The health intervention with the most substantial research evidence for treating methamphetamine use disorder is Contingency Management. An August 17, 2022, Seattle Times editorial[3] urged local lawmakers to implement Contingency Management to meet the need for treatment of methamphetamine use disorder.

However, despite its strong evidence base, Contingency Management has not been widely implemented in Seattle. Two pilot Contingency Management efforts are currently being developed by King County and Washington state.[4] However, these pilot programs are clinic-

[2] https://www.seattle.gov/documents/Departments/CityAuditor/auditreports/EncampmentsProgressDashboard.pdf
[3] https://www.seattletimes.com/opinion/editorials/improve-on-much-needed-meth-treatment-option/
[4] The Washington State Health Care Authority (https://www.hca.wa.gov/assets/program/contingency-mangement-fact-sheet.pdf) is beginning to roll out clinic-based Contingency Management in approximately 20 clinics throughout the state, including one contracted to serve 30 individuals in Seattle. In addition, King County is funding a clinic-based Contingency Management pilot with MIDD Behavioral Health Sales Tax funds including one Seattle location that will serve approximately 15 individuals.

based and will only be able to reach a small number of the total population of people who use methamphetamine in Seattle. Therefore, more work is needed to effectively deliver evidence-based treatment for many more people currently using methamphetamine in Seattle.

We became aware of the methamphetamine problem in Seattle through our audit work on unsanctioned encampments and organized retail crime. In our July 15, 2022 audit, The City of Seattle Should Use a Data Dashboard to Track its Progress in Addressing Unsanctioned Encampments,[5] requested by Seattle City Councilmembers Andrew Lewis and Lisa Herbold, we recommended that the City of Seattle (City) track whether conditions related to unsanctioned encampments are getting better or worse over time. This included tracking changes in the number of fatal overdoses among people who are unsheltered, including fatal overdoses involving methamphetamine. Also, in the course of our work on our forthcoming audit on Organized Retail Crime (ORC) fencing operations, requested by Seattle City Councilmembers Andrew Lewis and Lisa Herbold, we learned that ORC crime rings often target vulnerable individuals to serve as "boosters" to steal certain items from retailers that those crime rings can easily monetize. These "boosters" are often homeless and/or people with substance use disorders, including methamphetamine use disorder.

To conduct this audit, our office worked with the Promoting Research Initiatives in Substance Use and Mental Health Collaborative[6] (PRISM) at Washington State University. The PRISM Collaborative was established to address disparities in substance use disorder and mental health treatment. In addition to conducting leading research on Contingency Management, the WSU PRISM Collaborative is currently providing training and technical assistance to several states implementing Contingency Management, including California,[7] Montana, and Washington.[8] We also worked with officials from the Washington State Health Care Authority, the Washington State Opioid Treatment Authority, King County Department of Community & Human Services, and Public Health Seattle and King County to gather more information on the planned implementation of Contingency Management in Seattle. We would especially like to acknowledge Dr. Michelle Peavy and Dr. Michael McDonell, from WSU PRISM, for their input on this audit.

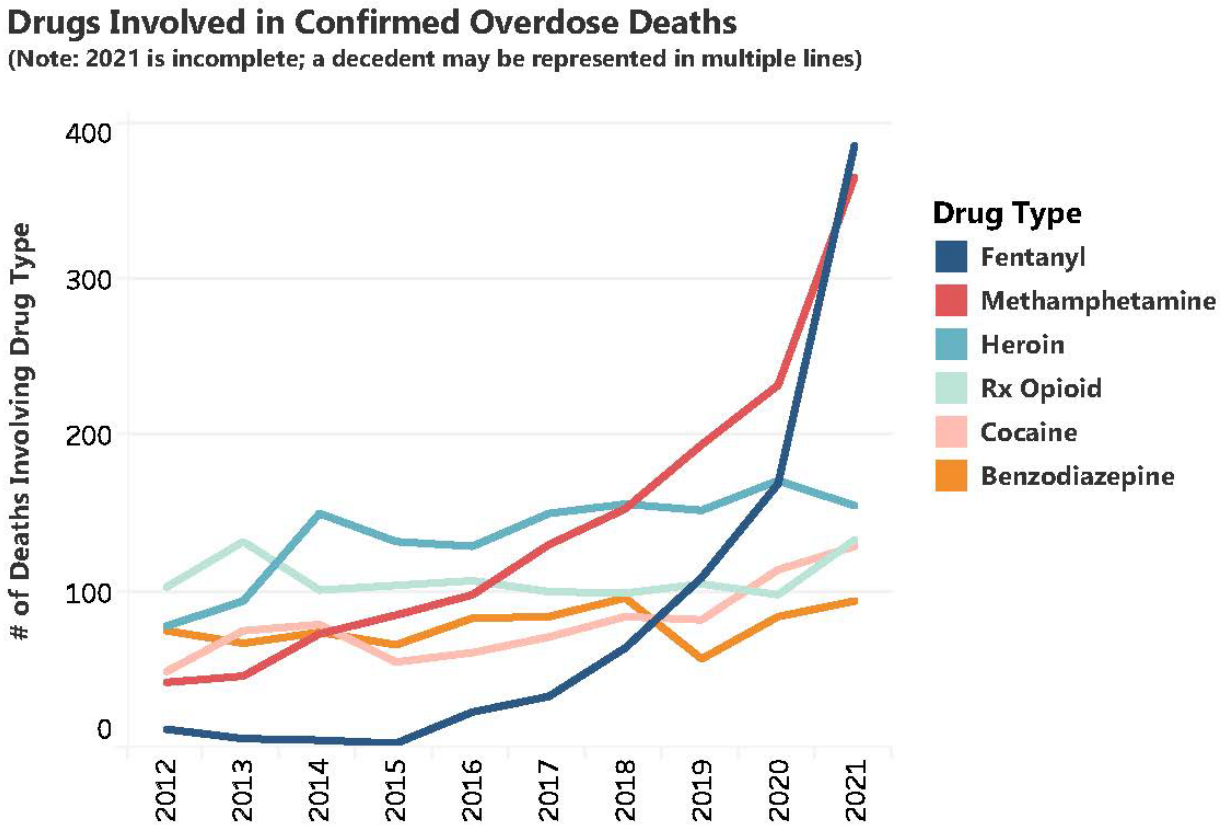
[5] https://www.seattle.gov/documents/Departments/CityAuditor/auditreports/EncampmentsProgressDashboard.pdf
[6] https://www.prismcollab.org/
[7] https://www.dhcs.ca.gov/Pages/DMC-ODS-Contingency-Management.aspx
[8] https://www.hca.wa.gov/assets/program/contingency-mangement-fact-sheet.pdf

TREATMENT FOR METHAMPHETAMINE USE DISORDER IS NEEDED IN SEATTLE

Recent data indicates an increasing co-occurrence of opioid use disorder and methamphetamine use disorder among people in Seattle.

Currently, there is no medication treatment for methamphetamine use disorder. Methamphetamine use can have severe health consequences for those who use it as well as implications and costs to society. Among the general population in King County, methamphetamine-involved deaths have risen from 98 in 2016 to 365 in 2021 (Exhibit 1). As of October 6, 2022, the King County Fatal Overdose Dashboard[9] reported 318 methamphetamine-involved fatal overdoses so far in 2022.

Exhibit 1: Annual Methamphetamine-involved Deaths in King County Have Risen from 98 in 2016 to 365 in 2021



Source: King County Fatal Overdose Dashboard

[9] https://kingcounty.gov/depts/health/examiner/services/reports-data/overdose.aspx

Stimulant-involved fatal overdoses in King County have risen more significantly for American Indian and Black people.

These fatal overdose data also indicate increasing racial disparity for deaths involving stimulants, including methamphetamine. From 2017 to 2021, fatal overdoses involving stimulants in King County have increased more than 100 percent across all racial groups. Fatal overdoses involving stimulants have risen even more sharply for American Indian and Black people. For Black people, there was a 244 percent increase (25 in 2017 to 86 in 2021) in stimulant-involved fatal overdoses; for American Indians, the increase was 233 percent (6 in 2017 to 20 in 2021). There was an increase of 115 percent (129 in 2017 to 277 in 2021) for White people.

This trend is consistent with a 2021 report sponsored by the National Institute on Drug Abuse[10] that found that populations at higher risk for methamphetamine use disorder diversified rapidly from 2015 to 2019. For example, during this period, there was a 1000 percent increase in methamphetamine use disorder (without injection) among Black people, and a 300 percent increase in methamphetamine use disorder (without injection) among people aged 18 to 23, an important period of brain development.

Methamphetamine use adversely affects people who are homeless.

Methamphetamine use adversely affects people who are homeless. The 2021 Washington State Syringe Service Program Health Survey[11] results indicate that two-thirds of respondents (67 percent) reported having unstable or no housing at all. Among the respondents, methamphetamine use was common, by itself or in combination with other substances. More respondents had used methamphetamine than heroin by itself (86 percent versus 69 percent), yet almost half (48 percent) had used both mixed together (as a "goofball").

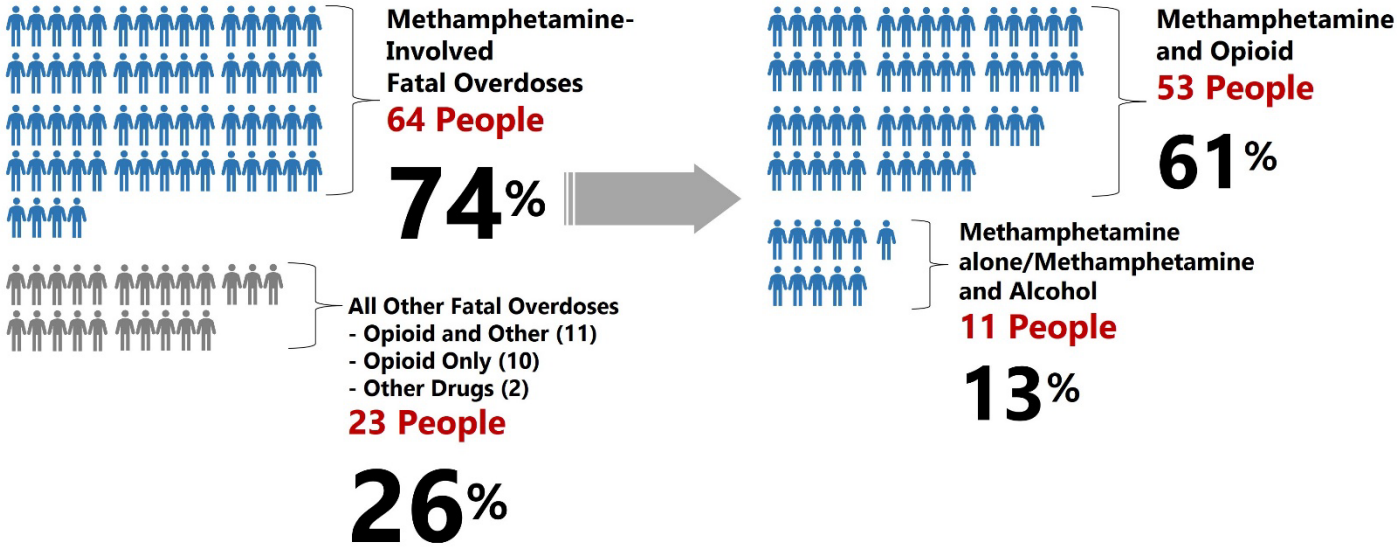
Methamphetamine plays an increasingly significant role in fatalities among people who are homeless in Seattle and King County. Year to date, methamphetamine, especially in combination with opioids, has been responsible for the majority of fatal overdoses in Seattle and King County among people presumed homeless. In King County, in 2022 through August, there were 87 fatal overdoses among people presumed homeless. Of these deaths, methamphetamine was a cause of death for 64 (74 percent of) individuals. Methamphetamine and opioids, in combination, accounted for 61 percent of the fatal overdoses among people experiencing homelessness (Exhibit 2).

[10] https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2784468

[11] The biennial Washington State Syringe Service Program Health Survey (https://adai.uw.edu/wordpress/wp-content/uploads/ssp-health-survey-2021.pdf) is the state's primary source of data on the substance use patterns, health behaviors, and health care needs of people who use drugs and utilize syringe service programs (SSPs). The University of Washington's Addictions, Drug & Alcohol Institute (ADAI) conducts the survey in collaboration with Public Health-Seattle & King County (PHSKC) and the statewide SSP network.

In the first eight months of 2022, 74 percent of the fatal overdoses among people presumed homeless in King County occurred in Seattle.

Exhibit 2: Methamphetamine Has Contributed to 74% of Fatal Overdoses of People Presumed Homeless in King County, January – August 2022



Source: City of Seattle Office of City Auditor analysis of King County Medical Examiner's Office, King County Presumed Homeless Death Report, as of August 31, 2022

Methamphetamine use has increasingly detrimental societal effects.

Stimulant use disorder (including methamphetamine use disorder) has adverse effects for individuals that are well-documented, including potentially deadly stress to the cardiovascular system and a host of adverse psychological and neurological effects, including panic attacks, hostility, paranoia, psychosis, and violent behavior[12].

Hospital Costs. There is evidence that the societal costs of methamphetamine use disorder have increased significantly in recent years. For example, a 2018 study found that between 2003 and 2015, stimulant-related hospitalizations in the U.S. increased to a greater degree than hospitalizations associated with any other substance, from 55,447 in 2008 to 206,180 in 2015. Associated annual hospital costs increased from $436 million in 2008 to $2.17 billion in 2015 (Winkelman, et al., 2018).

Crime. Recent research indicates that people with methamphetamine use disorder are more likely than people with other substance use

[12] See the Substance Abuse and Mental Health Services Administration's (SAMHSA) 2020 Evidence-Based Resource Guide for the Treatment of Stimulant Use Disorder for more information on individual and societal effects of stimulant misuse disorder (https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-06-01-001.pdf).

disorders to commit property crimes and violent offenses (Gizzi & Gerkin, 2010) (Hoffman, et al., 2020). In King County, methamphetamine was the most commonly detected drug found in police evidence testing from 2016-2019, according to the 2020 National Drug Early Warning System report.[13]

Domestic Violence. A 2019 review of 11 studies on methamphetamine use and domestic violence found a high prevalence (between 25-50 percent) of domestic violence offending among people who use methamphetamine. Among people studied with severe and psychotic methamphetamine use disorder, the rate of domestic violence offending exceeded 90 percent (Dowling & Morgan, 2019). In addition, among women with methamphetamine use disorder, over 70 percent reported histories of physical and sexual abuse and are more likely than men to present for treatment with more significant psychological distress (Rawson, Gonzales, & Ling, 2006).

There is an unmet and urgent need for methamphetamine treatment.

In Seattle, we estimate that nearly 3,800 people ages 18 and over suffer from methamphetamine use disorder, based on 2020 data.[14] Recent survey data suggest that a significant number of these individuals might be interested in treatment to reduce or stop their methamphetamine use, especially if the treatment is easy to get. A 2019 survey of people who inject drugs in Washington state[15] found that, among 281 people whose primary drug was methamphetamine, 48 percent of those individuals responded that they were somewhat or very interested in reducing or stopping stimulant use. Further, among those interested in reducing or stopping their methamphetamine use, 93 percent indicated that they would be interested in receiving help with treatment (e.g., counseling, care navigation, other services) if it was easy to get.

According to the 2020 National Drug Early Warning System report, callers to the King County Recovery Helpline in 2019 most often mentioned methamphetamine and heroin, accounting for more than 500 calls for each.

[13] https://ndews.org/wordpress/files/2020/08/SCS-Report-2020-King-County-Seattle-FINAL.pdf

[14] We calculated an estimate of 3,781 people aged 18 and older in Seattle with methamphetamine use disorder. This is based on a 2020 National Survey on Drug Use and Health rate of 0.6% for methamphetamine use disorder among people 18 and over (https://www.samhsa.gov/data/sites/default/files/reports/rpt35323/NSDUHDetailedTabs2020v25/NSDUHDetailedTabs2020v25/NSDUHDetTabsSect5pe2020.htm); and 2020 Census data for Seattle population age 18 and over of 630,174 (https://www.seattle.gov/opcd/population-and-demographics/about-seattle).

[15] https://adai.uw.edu/wa-state-syringe-exchange-health-survey-2019-results/

CONTINGENCY MANAGEMENT IS AN EVIDENCE-BASED TREATMENT FOR METHAMPHETAMINE USE DISORDER

Contingency Management is the best currently available treatment option for people with methamphetamine use disorder.

Since there is no U.S. Food and Drug Administration-approved pharmacological treatment for stimulant use disorder, practitioners must rely on behavioral interventions. Contingency Management is a behavioral intervention with the strongest research evidence for methamphetamine use disorder.[16] People undergoing Contingency Management receive rewards in exchange for specific behaviors (e.g., methamphetamine-negative urine drug tests). Rewards are provided according to Contingency Management principles, which have been based on extensive study of this intervention.

A considerable body of research evidence supports the effectiveness of Contingency Management for addressing methamphetamine use disorder. Studies demonstrate that Contingency Management is effective for abstinence from methamphetamine, reduced methamphetamine craving, and higher use of other treatments and services. Contingency Management for methamphetamine use disorder has also shown benefits in reducing risk behaviors that contribute to the transmission of HIV and other sexually transmitted infections (Brown & DeFulio, 2020).

Additional research has demonstrated that Contingency Management is an effective treatment for other substance use disorders, including alcohol, cannabis, cocaine, and nicotine.[17] Contingency Management has also been proven an effective intervention for engaging and retaining people in medication treatment for opioid use disorder (MOUD).[18]

[16] See this 2020 systematic review of 27 studies of Contingency Management for methamphetamine use disorder (Brown & DeFulio, 2020) (https://www.sciencedirect.com/science/article/abs/pii/S0376871620304725?via%3Dihub) and this 2013 evaluation of Contingency Management (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4242089/) at a Seattle-based community mental health and addiction treatment agency (McDonell, et al., 2013).

[17] See, for example, this 2006 meta-analysis of 44 studies of Contingency Management (https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1360-0443.2006.01581.x) that support its effectiveness for substance abuse disorders including alcohol, cannabis, cocaine, and nicotine (Prendergast, Podus, Finney, Greenwell, & Roll, 2006); and this 2017 Seattle-based study of Contingency Management for co-occurring alcohol use disorder and serious mental illness (McDonell, et al., 2017) (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5378651/) and this 2018 randomized controlled trial of Contingency Management for heavy drinkers with serious mental illness (Oluwoye, et al., 2018) (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5995562/).

[18] See, for example, this 2021 systematic review and meta-analysis of Contingency Management (https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2782768) that included 74 randomized clinical trials (Bolivar, et al., 2021) of Contingency Management for patients receiving medication for opioid use disorder.

Although it has strong research evidence, Contingency Management had not been widely implemented in local jurisdictions[19] due in part to restrictions with Medicaid reimbursement under the previous federal administration. The current federal administration has recently developed anti-fraud/abuse protocols[20] for the motivational incentives that are delivered as part of the Medicaid-covered delivery of Contingency Management. This has paved the way for large-scale investments in Contingency Management to address the growing substance use disorder crisis. Indeed, California, Wisconsin, and Montana are investing in large-scale Contingency Management pilots for their State Opioid Response sites. The Washington State Health Care Authority is beginning to roll out Contingency Management in a smaller pilot in about 20 clinics throughout the state, including one Seattle clinic location that will serve 30 people.

How Does Contingency Management Work?

Contingency Management (CM) is an evidence-based intervention that provides immediate, tangible, and desirable rewards for objective evidence of behavior change (e.g., a negative urine drug test). Social workers, outreach workers, or clinicians can be trained to deliver the CM intervention with fidelity to the CM model to ensure that participants receive effective CM treatment. The CM intervention itself is 12 weeks long, during which time CM participants meet with their CM practitioner twice per week. Research studies of CM often include an additional three-month follow-up period after the 12-week CM intervention to track the participants' progress.

At each of the twice-weekly meetings during the 12-week intervention, participants submit a urine drug test and update their CM practitioner on their progress with recovery goals. When the urine test is negative for the targeted substance (e.g., methamphetamine, alcohol), the participant immediately receives a reward (e.g., gift card, voucher). Reward amounts escalate with consistent abstinence as demonstrated by the negative urine tests. However, a missed appointment or a positive urine test will reset the reward back to the original amount. Based on current CM protocols, the average total reward amount is $300 per participant over the 12-week intervention.

[19] Since 2011, the U.S. Department of Veterans Affairs has implemented Contingency Management (https://www.va.gov/HOMELESS/nchav/resources/interventions/contingency-management.asp) in 118 of its sites.

[20] These new protocols for compliance with the federal Civil Monetary Penalties Law and the Anti-Kickback Statute were developed and are enforced by the U.S. Department of Health and Human Services Office of the Inspector General.

Is Contingency Management Effective for All People Who Use Methamphetamine?

A 2020 systematic review[21] of 27 studies of Contingency Management for methamphetamine use disorder concluded, "Contingency Management is broadly effective in reducing methamphetamine use and promoting attendance to recovery-related appointments in people with methamphetamine use disorders and appears to produce broad beneficial effects beyond the behaviors targeted for intervention."

Although Contingency Management is "broadly effective," more research is needed to ensure that it will evolve over time to increase its effectiveness across different populations and measure long-term abstinence.

Some of the studies included in the review suggest that outcomes of Contingency Management may vary based on race and severity of methamphetamine use. For example, three of the studies in the review found that White people were more likely to have positive outcomes than other racial groups (e.g., 76.5 percent likelihood of treatment response for White vs. 46.8 percent likelihood of treatment response for non-White). In addition, one of the studies indicated that Contingency Management was less effective for participants who reported a longer history of methamphetamine use (e.g., seven years of lifetime methamphetamine use versus four years of use), and another study indicated that Contingency Management was also less effective for participants who reported higher methamphetamine use at baseline. These findings point to a need to tailor the Contingency Management intervention to meet the needs of certain populations. Indeed, a study of a Contingency Management intervention specifically designed for homeless, substance-using men who have sex with other men showed sustained reductions in methamphetamine and other drug use through the 12-month follow-up period compared with the control participants.

The systematic review also acknowledged that there is a gap in the research evidence regarding Contingency Management and long-term abstinence from methamphetamine use. Some current research on long-term abstinence suggests that reductions in methamphetamine use are not sustained after six months post-treatment. In contrast, other research suggests that abstinence is sustained for 12 months after treatment, including when Contingency Management has been combined with Cognitive Behavioral Therapy.

[21] Brown, H. D., & DeFulio, A. D. (2020, November). Contingency management for the treatment of methamphetamine use disorder: a systematic review. *Drug and Alcohol Dependence, 216*, 1-13. https://www.sciencedirect.com/science/article/abs/pii/S0376871620304725?via%3Dihub

GOVERNMENT SHOULD SCALE-UP CONTINGENCY MANAGEMENT IN SEATTLE

In 2021, the Seattle City Council passed Resolution 32026[22] requesting King County and the State of Washington to increase services to address behavioral health conditions, including substance use disorder treatment. To date, the State and County rollout of Contingency Management in Seattle is limited to two small clinic-based pilot programs[23] that are currently under development and will serve approximately 45 people. This represents a small fraction of people in Seattle who have methamphetamine use disorder.

To address the urgent issue of methamphetamine use disorder, more work is needed by government to scale up Contingency Management and reduce barriers to participation. This could include delivering Contingency Management in non-clinical settings, including directly to the places where people reside (e.g., tiny house villages, permanent supported housing, etc.). Another area of exploration is delivering Contingency Management for methamphetamine use in combination with Contingency Management to address other substance use (e.g., alcohol), or encourage connection to evidence-based opioid treatment. These innovations in Contingency Management should be rigorously evaluated to ensure that the City achieves positive outcomes for the individuals and the Seattle community.

1. **Reduce Barriers and Address Racial Disparities.** To bring Contingency Management to scale in Seattle, it will be important to consider new implementation strategies that will reduce barriers to this treatment, including delivering Contingency Management in non-clinic settings. This could include providing Contingency Management to people in Seattle who are homeless or recently homeless directly in the places where they are

[22] https://seattle.legistar.com/LegislationDetail.aspx?ID=5215759&GUID=BDF018DA-BF0E-4209-B3B3-92C3E2276A2F&Options=ID%7CText%7C&Search=&FullText=1

[23] The Washington State Health Care Authority (https://www.hca.wa.gov/assets/program/contingency-mangement-fact-sheet.pdf) is beginning to implement Contingency Management in about 20 clinics throughout the state that serve people with opioid use disorder, including one Seattle clinic location that is contracted to serve 30 individuals in Seattle. In addition, King County has recently funded a Contingency Management pilot with $200,000 of MIDD Behavioral Health Sales Tax funds (https://kingcounty.gov/depts/community-human-services/mental-health-substance-abuse/midd.aspx). Eligible providers include those who offer access to medications for opioid use disorder (MOUD) and Opioid Treatment providers (OTPs) who are engaging with clients using Methadone and Buprenorphine. One Seattle clinic has been funded through this King County pilot, and it is anticipated to serve about 15 people with co-occurring opioid use disorder and methamphetamine use disorder in Seattle.

currently residing (e.g., tiny house villages, transitional housing, permanent supportive housing).

A scaled-up implementation of Contingency Management should also be designed to address the racial disparities evidenced in the disproportionate and increasing stimulant-involved fatal overdoses among Black people. This work could be informed by lessons learned from the Washington State University Promoting Research Initiatives in Substance Use and Mental Health Collaborative (PRISM), [24]which has been partnering with American Indian and Alaska Native communities for the past five years adapting Contingency Management to fit these communities, and empirically exploring how well Contingency Management works to reduce alcohol use and improve outcomes in American Indian and Alaska Native adults who are suffering from alcohol use disorders.

2. **Address Co-Occurrence of Opioid and Methamphetamine Use Disorder.** Innovative adaptations of Contingency Management should also be explored to address the growing co-occurrence of methamphetamine use disorder and opioid use disorder. This would be possible because Contingency Management is proven effective for treating methamphetamine use disorder and retaining people in medication treatment for opioid use disorder (MOUD). Further, this would be consistent with the 2021-2022 Washington State Opioid and Overdose Response Plan that acknowledges that, "addressing the rise in methamphetamine related polysubstance use requires adapting strategies within this plan to consider many drugs, not just opioids." However, despite the need and the evidence base, we are not aware of implementations of Contingency Management that have offered participants to select which substance they would like to target for reduction. Providing participants an array of Contingency Management targets (e.g., to reinforce reductions in methamphetamine or alcohol use or engagement in treatment with medications for opioid use disorder) would be another possible way to reduce barriers and increase participation in Contingency Management.

3. **Rigorously Evaluate Efforts.** Rigorous evaluation should be a key component of the implementation of Contingency Management in Seattle. The City will realize multiple benefits from rigorously tracking progress and evaluating its programs. For example, our July 15, 2022 audit, The City of Seattle Should Use a Data Dashboard to Track its Progress in Addressing

[24] https://www.prismcollab.org/

Unsanctioned Encampments,[25] identifies five key benefits from using data to track the progress of City efforts: Improvement, Coordination, Accountability, Celebration, and Sustainability.

Although Contingency Management is an evidence-based intervention for methamphetamine use disorder, it is still essential to evaluate large-scale or innovative adaptations of Contingency Management to track fidelity to the model, ensure that positive outcomes are achieved, and learn whether there are any disparities in outcomes for specific populations. For example, the U.S. Department of Veterans Affairs (VA) National Center on Homelessness Among Veterans[26] has sponsored and participated in multiple research studies on Contingency Management at VA sites. In addition, the State of California has contracted with UCLA to evaluate its statewide Contingency Management program.[27] The UCLA evaluation will provide policymakers with important information, including disparities in reaching participants, the effectiveness of treatment, and implementation successes and challenges.

Contingency Management has an extensive research base, demonstrating efficacy across a range of substance use behaviors in clinical settings. Should the City implement Contingency Management in non-clinical settings to address methamphetamine use disorder, it should ensure that a rigorous impact evaluation is undertaken to understand whether Contingency Management is achieving the desired outcomes for the individuals served and the Seattle community.

Recommendation 1

Government, including the City of Seattle, should act with urgency to address methamphetamine use disorder in non-clinical settings by exploring ways to scale up implementation of evidence-based treatment (i.e., Contingency Management) with innovations that reduce barriers to participation and with ongoing rigorous research to ensure that positive outcomes are achieved.

[25] https://www.seattle.gov/documents/Departments/CityAuditor/auditreports/EncampmentsProgressDashboard.pdf
[26] https://www.va.gov/HOMELESS/nchav/resources/interventions/contingency-management.asp
[27] https://www.dhcs.ca.gov/Documents/Contingency-Management-Policy-Paper-3-16-22.pdf

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OBJECTIVES, SCOPE, AND METHODOLOGY

Objectives, Scope, and Methodology

This audit report grew out of audit work requested by Seattle City Councilmembers Andrew Lewis and Lisa Herbold, specifically our July 15, 2022 audit, The City of Seattle Should Use a Data Dashboard to Track is Progress in Addressing Unsanctioned Encampments[28] and our forthcoming audit regarding Organized Retail Crime fencing operations in Seattle.

This audit: 1) identifies reasons why the City of Seattle should act with urgency to provide evidence-based treatment for people who use methamphetamine; 2) provides an overview of Contingency Management, an evidence-based treatment that has been proven effective for people with methamphetamine use disorder; and 3) offers some possibilities for deploying Contingency Management directly to the places where people with methamphetamine use disorder reside.

To conduct this audit, our office worked with the Promoting Research Initiatives in Substance Use and Mental Health Collaborative[29] (PRISM) at Washington State University. The PRISM Collaborative was established to address disparities in substance use disorder and mental health treatment. In addition to conducting leading research on Contingency Management, the WSU PRISM Collaborative is currently providing training and technical assistance to several states that are implementing Contingency Management, including California,[30] Montana, and Washington.[31] We would especially like to acknowledge Dr. Michelle Peavy and Dr. Michael McDonell, from WSU PRISM, for their input on this audit.

We also worked with officials from the Washington State Health Care Authority, the Washington State Opioid Treatment Authority, King County Department of Community & Human Services, and Public Health Seattle and King County to gather more information on planned implementation of Contingency Management in Seattle.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[28] https://www.seattle.gov/documents/Departments/CityAuditor/auditreports/EncampmentsProgressDashboard.pdf
[29] https://www.prismcollab.org/
[30] https://www.dhcs.ca.gov/Pages/DMC-ODS-Contingency-Management.aspx
[31] https://www.hca.wa.gov/assets/program/contingency-mangement-fact-sheet.pdf

APPENDIX A

Seattle Office of City Auditor Mission, Background, and Quality Assurance

Our Mission:
To help the City of Seattle achieve honest, efficient management and full accountability throughout City government. We serve the public interest by providing the City Council, Mayor and City department heads with accurate information, unbiased analysis, and objective recommendations on how best to use public resources in support of the well-being of Seattle residents.

Background:
Seattle voters established our office by a 1991 amendment to the City Charter. The office is an independent department within the legislative branch of City government. The City Auditor reports to the City Council and has a four-year term to ensure their independence in deciding what work the office should perform and reporting the results of this work. The Office of City Auditor conducts performance audits and non-audit projects covering City of Seattle programs, departments, grants, and contracts. The City Auditor's goal is to ensure that the City of Seattle is run as effectively, efficiently, and equitably as possible in compliance with applicable laws and regulations.

How We Ensure Quality:
The office's work is performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States. These standards provide guidelines for audit planning, fieldwork, quality control systems, staff training, and reporting of results. In addition, the standards require that external auditors periodically review our office's policies, procedures, and activities to ensure that we adhere to these professional standards.

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