Spokane Opioid Treatment Program:

Program Evaluation

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Program Evaluation

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May 2025

Executive Summary

The Spokane Opioid Treatment Program (OTP), operated by the Spokane Regional Health District (SRHD), is one of the largest public opioid treatment programs in Washington State. With over 1,000 actively enrolled clients, it plays a vital role in reducing opioid use disorder (OUD) in Spokane County through medication-assisted treatment (MAT), behavioral healthcare, peer support, and harm reduction services (SRHD, 2024). This evaluation plan outlines a strategy for assessing program effectiveness. It includes background on community need, a program logic model, a detailed data collection strategy, a quasi-experimental evaluation design, a mixed-methods analysis plan, and a plan for sharing findings with local stakeholders. By analyzing both quantitative outcomes and qualitative insights, this evaluation will provide evidence to inform program improvement, policy development, and ongoing public health investment in Spokane County.

This plan is based on months of internal research, community engagement, and review of existing public health frameworks. It builds on lessons learned from previous implementation efforts and incorporates client perspectives, state guidelines, and local opioid data (Washington State Department of Health, 2024; CDC, 2022). It also emphasizes the importance of using data not only for accountability but to better center community voice and support long-term systems change. Through this evaluation, SRHD hopes to strengthen service delivery and expand its reach to more vulnerable populations across Spokane.

In addition to direct health consequences, opioid use disorder impacts the broader community through increased emergency system costs, public safety strain, and housing instability (CDC, 2022). The burden falls disproportionately on those experiencing poverty, racial discrimination, and limited access to healthcare. This reinforces the need for a multi-layered, equity-focused intervention like the Spokane OTP. Spokane's social service system, while resourceful, has been under tremendous pressure, including emergency shelters, outpatient clinics, and crisis response teams. The ongoing opioid crisis places further strain on these services, often resulting in long wait times, fragmented care, and missed opportunities for engagement. Because of this, centralized and coordinated programs like the Spokane OTP are essential to creating stability and long-term recovery opportunities in the region.

Another factor contributing to the need for evaluation is the changing drug supply, particularly the presence of fentanyl and other synthetic opioids (NIDA, 2023). These substances increase the risk of overdose and often complicate withdrawal and treatment outcomes. A responsive evaluation plan helps ensure that the Spokane OTP continues to adapt effectively. The local housing shortage also plays a significant role in shaping recovery outcomes. Without access to stable housing, even the best clinical care may be undermined by environmental instability.

The program’s logic model includes assumptions such as the availability of stable funding, continued staffing, and accessible services for high-risk populations. It is flexible enough to evolve with changing trends in opioid misuse, including the rise of synthetic opioids like fentanyl (NIDA, 2023). The model accounts for feedback loops — for example, increased stability in housing or employment can improve treatment retention, which in turn supports longer-term outcomes. Completed referrals or return visits help verify that care coordination efforts are

working. The program also indirectly supports community resilience by reducing strain on emergency response systems. Clients who are stabilized through regular treatment are less likely to require hospitalization, emergency shelter, or law enforcement intervention, improving the efficiency and equity of broader public services.

The evaluation includes robust data collection strategies. Clients may complete surveys using iPads at the clinic, QR codes on appointment cards, or text message reminders through the outreach calendar. Collecting data through multiple methods minimizes nonresponse bias and ensures harder-to-reach populations are included. Each survey includes standard measures validated by SAMHSA and CDC guidelines, such as recent substance use, housing status, employment, and transportation access (SAMHSA, 2020; CDC, 2022). Questions also cover stigma, access to care, and client perceptions of program support. These insights will help the team understand not just what is changing, but how recovery is experienced.

Surveys will be translated into multiple languages, including Spanish and Russian, to reflect Spokane's immigrant and refugee population. Peer staff will receive cultural humility training and help clarify questions during survey administration. Clients with literacy challenges will receive one-on-one or verbal support. All data will be entered into a secure database and reviewed for quality and consistency before analysis begins.

Background and Needs Assessment

Spokane County is experiencing a growing opioid crisis that aligns with national trends, with some of the most severe local impacts concentrated among unhoused individuals and those facing economic hardship. In 2024, the Spokane County Medical Examiner's Office reported over 250 opioid-related deaths (Spokane County Medical Examiner’s Office, 2024), and local emergency departments documented more than 1,400 opioid-related visits (Washington State Department of Health, 2024). These figures reflect a broader issue: for every opioid-related death, the CDC estimates there are 30 people with opioid use disorder and 130 more who misuse opioids without meeting full diagnostic criteria (CDC, 2022). Based on Spokane’s population, this means tens of thousands of residents may be directly or indirectly affected by opioid use.

To address this crisis, the Spokane Regional Health District (SRHD) has operated the Opioid Treatment Program (OTP) since 1990. The program currently serves more than 1,000 actively enrolled clients and is Washington State’s largest publicly operated opioid treatment provider (SRHD, 2024). Services include medication-assisted treatment (MAT) with methadone and buprenorphine, peer outreach, behavioral health support, and case management. Additionally, the program helps connect clients to housing, employment, and harm reduction services, including syringe access.

Despite the program’s longstanding presence and broad impact, there has not been a recent comprehensive mixed-methods evaluation. With the rise of fentanyl and other synthetic opioids, public health officials have expressed the need for a more agile and data-driven response (NIDA, 2023). This evaluation will assess the program’s effectiveness, explore whether it is reaching those most at risk, and identify opportunities to improve service delivery.

Spokane's housing shortage is another significant factor contributing to instability among OTP clients. Without access to stable housing, recovery is often disrupted, even with clinical support (Patton, 2015). Meanwhile, emergency systems such as hospitals, shelters, and law enforcement remain overwhelmed. Centralized, coordinated programs like the OTP are essential not only for individual care but also for reducing strain on these overstretched systems. This evaluation seeks to inform improvements that enhance both clinical outcomes and broader community resilience.

Logic Model and Outcome Measures

The Spokane Opioid Treatment Program is grounded in principles of harm reduction, public health, and behavioral science. It delivers a comprehensive approach that combines medication-assisted treatment (MAT), behavioral healthcare, mobile outreach, and wraparound services aimed at reducing opioid use and improving both individual and community health outcomes (SAMHSA, 2020). The program's logic model outlines how core inputs and activities lead to measurable short-, medium-, and long-term changes among participants and across Spokane County. A visual representation of this framework is provided in Appendix B: Logic Model Diagram.

Key inputs include trained clinical and peer staff, methadone and buprenorphine medications, stable funding, transportation access, harm reduction supplies, and mobile outreach infrastructure. These enable the program's core services, including clinical assessments, MAT dosing, counseling and therapy sessions, harm reduction education, peer and case management, transportation coordination, targeted outreach, and medication adherence tracking (CDC, 2022; SRHD, 2024). The use of mobile outreach teams expands the program's reach to individuals disengaged from traditional treatment settings.

Program outputs include the number of clients engaged through outreach, individuals receiving MAT, sessions completed, referrals made to housing or employment services, and adherence to medication protocols—measured by dosing frequency and appointment attendance (Patton, 2015). These outputs demonstrate whether the program is being delivered as designed and whether it is reaching and retaining its intended population.

The program's primary outcomes include reductions in opioid use (measured via urinalysis and self-report) and overdose incidents (tracked through SRHD surveillance and EMS records). Secondary outcomes include improved housing stability, employment, and quality of life. Broader community-level indicators—such as rates of homelessness, emergency department use, and criminal justice involvement—will be tracked using both self-report and publicly available data sources (Washington State Department of Health, 2024).

To measure progress, outcome indicators include treatment retention, reductions in substance use, housing and employment gains, access to transportation, and client satisfaction. These outcomes will be assessed using a combination of administrative records and survey responses (see Appendix A: Survey Instrument).

Data will be disaggregated by race, gender, housing status, and other demographics to examine variation in impact. We will also analyze interaction effects—such as whether housing support improves outcomes differently depending on a participant's employment status, or whether peer support is more effective among certain age groups (Patton, 2015).

A variety of statistical tools will be used to assess program performance. Regression analysis will help identify predictors of positive outcomes, while cross-tabulations and data visualizations will be used to surface patterns. Qualitative responses from surveys and interviews will be thematically coded and triangulated with quantitative findings to provide a more nuanced understanding of how and why the program is making an impact (Rubin, 2001).

Data Collection Plan

This evaluation uses a mixed-methods data collection plan to measure both the outcomes and lived experiences of participants in the Spokane Opioid Treatment Program (OTP). Collecting both quantitative and qualitative data allows for a more comprehensive understanding of how the program affects clients and contributes to broader public health goals in Spokane County (Patton, 2015).

Quantitative data sources include administrative records maintained by the Spokane Regional Health District. These records provide detailed, time-stamped information on client enrollment, visit attendance, medication dosing schedules, urinalysis results, counseling participation, and referrals to external support services. This data will allow the evaluation team to assess treatment retention, changes in substance use, and engagement with other supportive resources over time (CDC, 2022).

Opioid use will be assessed through SRHD program records (urinalysis results) and self-report survey items. Overdose data will be pulled from EMS and hospital data systems. Housing and employment will be measured through both administrative records and the survey (Appendix A). Crime involvement and homelessness will rely on self-report and secondary public system data, where available.

In addition to administrative data, the team will administer a custom survey to clients who have been engaged with the OTP for at least six months. The survey includes a combination of scaled and open-ended questions and was developed using nationally recognized best practices for behavioral health evaluation (SAMHSA, 2020). It captures a range of social determinants of health, including housing stability, employment, access to transportation, food security, self-reported health status, and overall quality of life. The tool was reviewed internally and refined based on feedback from peer specialists and community stakeholders to ensure cultural relevance and clarity. A full version of the survey is included in Appendix A: Survey Instrument. Participants will be provided with a brief explanation of the study's purpose and their rights. A sample informed consent form is provided in Appendix C.

Survey delivery will be multimodal, including digital links via email or text, printed versions distributed at clinics, and in-person collection during mobile outreach. To increase participation

rates, participants will be offered small incentives such as grocery store gift cards or public transportation passes. Surveys will be anonymous and translated into multiple languages, including Spanish and Russian, to reflect the growing diversity of the population served by SRHD (Washington State Department of Health, 2024). Peer outreach specialists and clinical staff will receive training in survey administration and cultural humility to reduce response bias and enhance rapport with participants (Patton, 2015).

Qualitative data will be collected from open-ended survey responses and follow-up interviews with clients who consent to share more about their experiences. These narratives will offer depth and context to the quantitative findings, highlighting how clients perceive the support they receive and what challenges remain. Themes emerging from these data will be used to identify areas where services could be adjusted to better meet client needs (Rubin, 2001).

To enhance transparency and foster community trust, the evaluation team will also host a public feedback session. Clients, program staff, community-based service partners, and recovery leaders will be invited to review early findings and provide recommendations. This participatory approach helps ensure the results are interpreted and used collaboratively, increasing the likelihood that findings will influence program improvement efforts.

To further disseminate findings, the team will develop one-page summaries tailored to different audiences, including policymakers, public health partners, and people with lived experience. Reports will be distributed via email, posted on SRHD partner websites, and shared at outreach events. Through this work, SRHD aims to not only improve its own service delivery but contribute to broader learning across the harm reduction and behavioral health policy landscape.

Impact Evaluation Strategy

This evaluation will use a quasi-experimental design to assess the impact of the Spokane Opioid Treatment Program (OTP). Because random assignment to treatment and control groups is not possible in this real-world setting, we will use propensity score matching (PSM) to create a comparable control group. The goal of this approach is to reduce bias and ensure that differences in outcomes between groups can be attributed to participation in the program rather than pre-existing differences (Rubin, 2001).

The treatment group will consist of clients who have been engaged with the Spokane OTP for at least six months. The comparison group will be drawn from individuals in the Spokane community who meet the diagnostic criteria for opioid use disorder (OUD) but are not enrolled in the OTP. Comparison group data will be gathered from public health sources, such as emergency department records, jail intake data, or community health assessments, where available.

Matching variables will include demographic characteristics (such as age, gender, and race/ethnicity), housing status, employment status, history of treatment, prior overdose experience, and baseline health indicators. Propensity scores will be calculated based on these

variables, and individuals in the control group will be matched to OTP participants based on their likelihood of enrolling in treatment (Rubin, 2001).

Once the groups are matched, the evaluation will compare outcomes across both groups. Key outcomes include opioid use (measured through drug screens and self-reports), housing stability, employment, mental and physical health, and contact with emergency services. This design allows us to estimate the average treatment effect for participants who are similar to those in the comparison group.

To strengthen causal inference, a difference-in-differences (DiD) approach will also be incorporated. This method compares Spokane County with a similar county such as Yakima, Benton, or Clark—assuming that county has not introduced the same services (e.g., peer support or transportation). We will analyze outcome trends in both counties over time, before and after Spokane's program enhancements. Outcomes tracked may include overdose rates, emergency department visits, length of time in treatment, and self-reported return to use. If the counties exhibited similar trends prior to intervention but diverge afterward, the difference can more confidently be attributed to the OTP's added components (Angrist & Pischke, 2009).

While this approach is not as rigorous as a randomized controlled trial, using PSM and DiD together helps mitigate selection bias and strengthens our ability to draw meaningful conclusions about program impact. The full list of variables selected for matching, along with descriptions and data types, is presented in Appendix D.

Analysis Plan

This evaluation uses a mixed-methods analysis plan to assess the effectiveness of the Spokane Opioid Treatment Program (OTP). The quantitative component focuses on statistical comparisons of key outcomes using administrative and survey data, while the qualitative component draws from client feedback to explore perceptions of care and barriers to recovery (Patton, 2015).

Descriptive statistics will be used to summarize participant demographics, levels of program engagement, and baseline social determinants of health. These variables include housing status, employment, transportation access, and history of substance use treatment. Outcome variables will include retention in treatment, reductions in opioid use, housing status at follow-up, and changes in physical and mental health indicators (CDC, 2022).

Inferential analysis will involve multiple regression models to estimate the association between program participation and key outcomes, while controlling for confounding variables such as age, gender, race/ethnicity, baseline housing, and employment status. For instance, one model may predict the probability of achieving stable housing using OTP participation as the main predictor, alongside relevant control variables. Regression outputs will include coefficients, confidence intervals, and statistical significance levels to help identify which factors are most strongly associated with positive results (Rubin, 2001).

For the comparison group formed using propensity score matching, the analysis will include t-tests and chi-square tests to compare differences in outcomes between the treatment and

control groups. Matched-pair analyses will assess whether the differences in outcomes—such as reductions in overdose incidents or increases in housing stability—are statistically significant. This approach helps establish whether program participants experience measurable benefits that are not observed in otherwise similar individuals who did not enroll in the program (Rubin, 2001).

Qualitative data from open-ended survey responses and follow-up interviews will be analyzed using thematic analysis. The evaluation team will identify common themes such as perceived accessibility, satisfaction with services, relationship with peer and clinical staff, and barriers to sustained recovery. Responses will be coded and organized into categories to allow for interpretation of trends. These qualitative findings will provide additional depth to the numerical results and help explain how the program may contribute to recovery in ways that are not fully captured by quantitative measures (Patton, 2015).

Finally, triangulation of findings will be used to increase the credibility and completeness of results. By comparing insights from administrative data, survey metrics, and narrative responses, the evaluation will deliver a holistic understanding of the Spokane OTP's effectiveness. This mixed-methods approach ensures that the evaluation captures both what is changing and why those changes are occurring—providing a clear path forward for program refinement and strategic planning.

Dissemination and Use

The findings from this evaluation will be shared with key stakeholders to support informed decision-making, guide future funding allocations, and drive ongoing program improvement. Effective dissemination ensures that the data collected are not only useful internally, but also contribute to broader public health planning, community engagement, and policy development (Patton, 2015).

The primary audience for the findings includes leadership and staff at the Spokane Regional Health District, local behavioral health and housing service providers, harm reduction organizations, funders, and elected officials. Results will be compiled into a comprehensive report that outlines the evaluation's methodology, key findings, and recommendations. This report will include visual elements such as graphs, charts, and infographics to make the content more accessible and engaging (CDC, 2022).

In addition to the full report, summary briefs will be created for a wider community audience. These will be designed for easy distribution via email, social media, public bulletin boards, and during outreach events or coalition meetings. These community-friendly summaries will focus on core outcomes, client feedback, and success stories, offering highlights that are relevant to both service users and the general public.

To further engage the community and professional networks, the evaluation team will present findings at public health forums, community advisory board meetings, and professional conferences. If the results offer broader implications for policy or program design, they may also

be submitted for publication in peer-reviewed journals. Sharing evaluation outcomes in academic and public domains helps promote accountability and contributes to the field of substance use disorder treatment and recovery services (SAMHSA, 2020).

Internally, findings will be used to guide specific improvements in service delivery. These may include refining outreach strategies, adjusting client intake protocols, or enhancing coordination between treatment, housing, and employment support services. Feedback gathered from client surveys and interviews will play a particularly important role in shaping these adjustments, ensuring that the program remains responsive to the needs of those it serves (Patton, 2015).

By disseminating results widely and in accessible formats, the Spokane OTP can strengthen transparency, foster community trust, and ensure that evaluation is a meaningful tool for continuous learning and change—not merely a reporting requirement. Through this process, SRHD can also serve as a model for other jurisdictions seeking to build more accountable, data-informed public health systems.

References

Centers for Disease Control and Prevention. (2022, February 23). *Understanding the epidemic*. U.S. Department of Health & Human Services. https://www.cdc.gov/opioids/basics/epidemic.html

National Institute on Drug Abuse. (2023). *Principles of drug addiction treatment: A research-based guide* (3rd ed.). National Institutes of Health. https://nida.nih.gov/

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage Publications.

Rubin, D. B. (2001). Using propensity scores to help design observational studies: Application to the tobacco litigation. *Health Services and Outcomes Research Methodology, 2*(3–4), 169–188. https://doi.org/10.1023/A:1020363010465

Spokane County Medical Examiner's Office. (2024). *Annual overdose death report*.

Spokane Regional Health District. (2024). *Opioid Treatment Program internal report* [Unpublished internal document].

Substance Abuse and Mental Health Services Administration. (2020). *Medications for opioid use disorder*. U.S. Department of Health & Human Services. https://www.samhsa.gov/medications-substance-use-disorders/medications-opioid-use-disorder

Washington State Department of Health. (2024). *Opioid overdose trends in Spokane County*. https://doh.wa.gov/

Appendices

Appendix A: Survey Instrument
Appendix B: Logic Model Diagram
Appendix C: Consent Form
Appendix D: Propensity Score Matching Variables