Suicide Prevention: Peer Navigators

Providing Caring Contact and Post-Discharge Services to Individuals At Risk for Suicide

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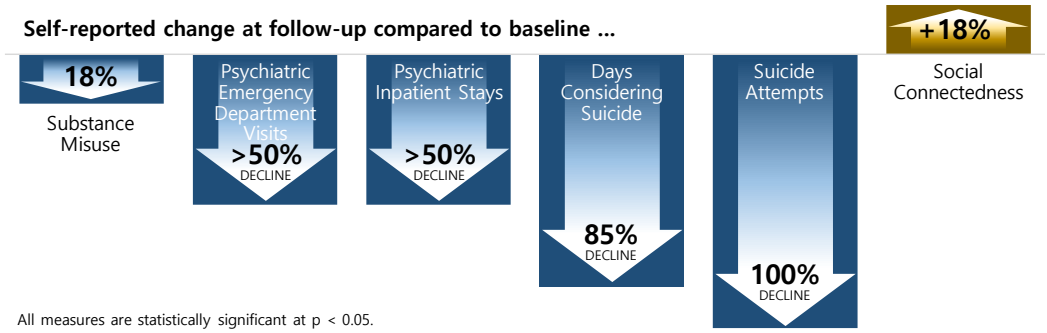
WASHINGTON'S COVID-19 EMERGENCY RESPONSE FOR SUICIDE PREVENTION (ERSP) program was implemented to address anticipated increases in suicide risk associated with the COVID-19 pandemic. The ERSP program trained medical professionals in suicide prevention; offered housing assistance to victims of domestic violence; and provided Peer Navigator (Peer Support) services to adults who screened positive for suicidality at participating facilities in King and Stevens County. This evaluation focuses on ERSP Peer Navigator services provided to 232 individuals from December 2020 to January 2022 at a domestic violence services site and participating emergency departments (EDs) and inpatient facilities. Staff at these sites referred eligible individuals to Peer Navigators with lived suicidality experience, who offered participants post-discharge services and care coordination. A digital health tool with on-demand evidence-based suicide prevention support (Jaspr Health™) was also made available to clients referred to the program. The analysis is based on structured interviews conducted with participants at baseline (pre) and at an average of 5 months after baseline (post).

Key Findings

Pre-post analyses of self-reported past-30-day behavior collected during baseline and follow-up interviews indicated that participants reported significant reductions in suicide attempts, psychiatric ED and inpatient events, and substance misuse, as well as increased social connectedness (Figure 1). Note that these short-term findings are descriptive and the analysis does not include the experiences of a statistically similar comparison group. These improvements may also reflect natural recovery from an acute psychiatric episode resulting in hospitalization. Therefore, while the findings are promising, we cannot confidently attribute these outcomes to the intervention without further investigation.

FIGURE 1.

Pre-Post Improvements for Participants Enrolled through November 2021



All measures are statistically significant at $p < 0.05$.

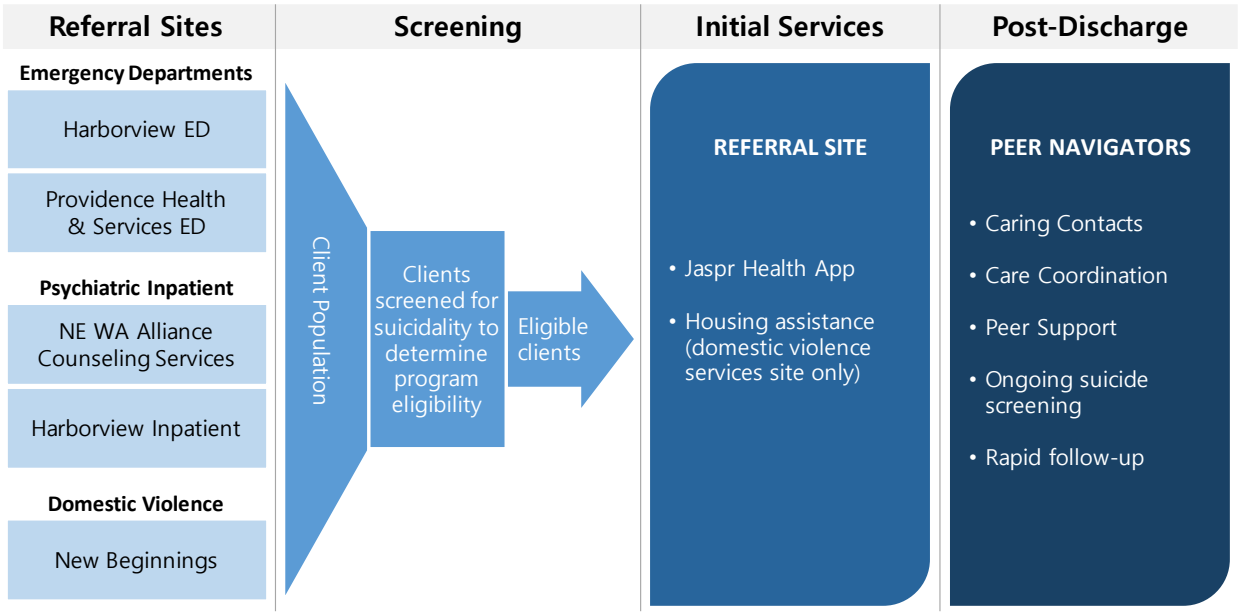
Program Description

The ERSP program was established through an $800,000 grant from the Substance Abuse and Mental Health Services Administration (SAMHSA). SAMHSA expected increases in anxiety, trauma, depression, grief, isolation, loss of employment, and financial instability brought on by the COVID-19 pandemic to increase suicide risk. Twenty-seven percent of the funding was used to develop and train Washington state medical providers in evidence-based suicide prevention. A portion of the remaining funds were used to resource the Peer Navigator program, which was administered by the Washington State Healthcare Authority and managed by the Harborview Medical Center Behavioral Health Institute.

The program served individuals over the age of 24 who recently attempted suicide or who screened positive for suicidality at participating referral sites in King County and Stevens County: Harborview ED, Harborview Inpatient Psychiatry, New Beginnings domestic violence services, Providence Health & Services ED, and Northeast Washington Alliance Counseling Service's psychiatric inpatient department and crisis stabilization house. King and Stevens counties were chosen due to the relative impact of COVID-19 case rates at the program's inception. EDs and inpatient facilities were considered ideal because research indicates suicide risk is significantly elevated in the month after discharge from psychiatric inpatient facilities and in the year following an ED visit (Goldacre et al., 1993; Goldman-Mellor, 2019). A domestic violence service site was included because individuals experiencing sexual or physical violence typical of domestic violence are at increased risk of suicide (Centers for Disease Control and Prevention, 2021). The statewide orders to stay home and practice social distancing were predicted to exacerbate domestic violence (DV) by increasing DV victims' social and physical isolation in abusive homes.

FIGURE 2.

Participant Entry into Program Services and the Services Received



Two hundred thirty two (232) participants were enrolled in the Peer Navigator program between December 2020 and January 2022. All participants screened positive for suicidality prior to referral to the program, and only participants above the age of 24 were enrolled in the program in accordance with the funder requirements.

Staff at participating sites (Figure 2) referred eligible individuals to ERSP Peer Navigators who received training in and employed a variety of suicide prevention techniques and relevant skills.[1] Peer Navigators followed up with individuals immediately before or after discharge from the referral site and provided care coordination tailored to each participant's needs, assistance with follow-up appointments for mental health care, outreach when appointments were missed, and referrals to support services such as housing assistance. Once the participant concluded this direct support, Peer Navigators began sending participants *Caring Contacts* messages at regular intervals.[2] When engaging participants, Peers providing peer support assisted with skill building, routinely addressed participants' thoughts about suicide, and employed motivational techniques to encourage continued engagement with Peers and mental health treatment.[3]

Peer Navigators and participants met in person or virtually, using telehealth, telephone, or text messaging. Peers maintained contact with participants until they no longer needed services or for three months after losing contact with a participant despite attempting re-engagement. In addition to Peer Navigator services, ERSP provided Peers and participants' access to the Jaspr Health™ application, which includes suicide prevention practices such as a comprehensive suicide assessment, lethal means counseling, a self-generated crisis safety plan, psychoeducational skill-building activities, and shared stories from people who have recovered from suicidality (Jaspr Health, 2020).

Methods

Peer Navigators collected basic demographic information on all 232 program participants. They also attempted to conduct structured baseline and follow-up interviews, using the NOMs (National Outcome Measures).[4] Peers conducted 149 baseline interviews within 30 days of their first meaningful interaction with a participant. Demographic information and baseline interviews were used to describe the characteristics of individuals served by the program. Depending on the participant's circumstances, Peers conducted follow-up interviews 1 to 12 months after baseline; the average length of time between baseline and follow-up interviews was 5 months. Due in part to the short length (13 months) of the program, the average 5-month span of program participation, and the funder's rules about when to conduct the survey, only 25% of participants completed a follow-up survey. Fifty-seven participants enrolled through November 2021 completed baseline and follow-up interviews prior to the end of the program in January 2022. These participants form the basis of the pre-post outcomes described in this report. Thirteen of the 57 participants completed multiple interviews. In such cases the most recent survey was used in the analysis. Chi-square tests of independence and paired *t*-tests were used to examine differences in participant characteristics and outcomes.

Participant Characteristics

38% of participants reported a recent suicide attempt at baseline

[1] Peer Navigator training included Caring Contacts; Suicide Safer Care; Motivational Interviewing; Bite Size Dialectical Behavior Therapy (DBT) Skills; Trauma-Informed Care; Crisis Awareness in Peer Settings; Post-Traumatic Stress Disorder (PTSD) in the Global Context; Understanding Anxiety, Depression and CBT; Food and Mood: Improving Mental Health through Diet and Nutrition; Motivational Peer Support; Supporting Victims of Domestic Violence; the ERSP-developed suicide prevention training; and clinical consultation with Harborview Mental Health Services for highly complex at-risk patients.

[2] *Caring Contacts* is an evidence-based suicide prevention practice in which caring messages with no expected response are sent to people at risk of suicide after discharging from health services (National Action Alliance for Suicide Prevention, 2019, p. 7).

[3] Peer support includes emotional support based on the relationship between a peer with lived experience and their client and the peer's encouragement of natural supports such as community resources and relationships that may improve the client's quality of life.

[4] The NOMs survey is located at https://www.samhsa.gov/sites/default/files/cmhs-noms-tool-adult-programs.pdf.

This section describes demographic information collected on all 232 program participants and additional details about the 149 participants who completed baseline interviews.

Demographics of all participants. ERSP Peer Navigator participants ranged from 25 to 70 years of age at baseline; the average age was 43 (Table 1). The majority of participants (48 percent) were White and the next highest percentage of participants were Black or African American (16 percent). Additionally, participants selected Asian (9 percent), American Indian or Alaska Native (8 percent), Hispanic or Latino (6 percent), or Native Hawaiian or other Pacific Islander (less than 5 percent). Six percent were of unknown race. Forty-five percent of participants were female; 46 percent were male; the remaining participants identified as transgender, selected "other" for gender, or were missing information on gender. The majority (58 percent) reported their sexual orientation as heterosexual; 7 percent reported bisexual, 7 percent reported gay or lesbian, 6 percent other, and 22 percent did not report their sexual orientation. Additionally, 15 percent of participants were served at a rural site, and 6 percent at the domestic violence services site.

TABLE 1.

Baseline Demographics of All Participants

TOTAL CASES = 232

DEMOGRAPHICS		
	NUMBER	PERCENT
Age		
Mean Age at Baseline	43 years	
25 - 34 Years of Age	85	37%
35 - 44 Years of Age	63	27%
45 - 54 Years of Age	42	18%
55+ Years of Age	39	16%
Missing or refused	<11	--
Race (not mutually exclusive)		
American Indian or Alaska Native	19	8%
Asian	21	9%
Black or African American	37	16%
Hispanic or Latino	14	6%
Native Hawaiian or other Pacific Islander	<11	--
White, Non-Hispanic	112	48%
Missing or refused	13	6%
Gender		
Female	105	45%
Male	107	46%
Transgender or Other	<11	--
Missing or refused	--**	--**
Sexual Orientation		
Bisexual	17	7%
Gay or Lesbian	15	7%
Heterosexual	135	58%
Other	14	6%
Missing or refused	61	22%
OTHER CHARACTERISTICS		
Rural site participant	35	15%
Domestic violence site participant	14	6%

-- Numbers below 11 were suppressed to protect participant confidentiality in accordance with HCA's Small Numbers Standard.
** Indicates cases where secondary suppression was required with numbers above 11.

Characteristics of participants with completed baseline interviews. Additional details are available on suicidality and other indicators of health and wellbeing that are associated with, or could influence, suicide risk for the subset of participants (n=149) who completed a baseline interview (Table 2). For example, in the 30 days prior to their baseline interview:

- Participants considered suicide an average of 13 days, and 38 percent of participants attempted suicide.[5]
- Eighty-four percent of participants visited an ED for emotional or psychological reasons.
- Eighty-six percent were hospitalized for a psychiatric reason.
- Fifty-two percent were not stably housed.
- Ninety percent experienced a traumatic event in their lifetime.

All measures are self-reported. See Technical Notes in the Appendix for measure definitions.

TABLE 2.

Baseline Characteristics of Participants who Completed Baseline Surveys

Self-Reported Health Indicators and Health Barriers, past 30 days	**Participants with Baseline Survey**		
	NUMBER Non-Missing Responses	NUMBER Responding "Yes"	PERCENT
Total baseline surveys	149	N/A	N/A
Mental illness indicated	148	129	87%
Hospitalization for psychiatric reason	147	126	86%
ED visit for emotional or psychiatric reason	147	123	84%
Substance misuse indicated	148	101	68%
Inpatient treatment or detox stay	148	13	9%
Daily or almost daily substance use (excluding tobacco)	148	46	31%
Any Illicit drug use (including marijuana)	147	87	59%
Binge drinking	144	51	35%
Not stably housed	148	77	52%
Not employed, in school, or retired	149	93	62%
Recent criminal justice involvement	149	<11	--
Recent physical abuse	146	20	14%
Not socially connected	147	97	66%
Not functioning in everyday life	149	122	82%
Quality of life poor or very poor	148	65	44%
Overall health fair or poor	147	80	54%
Feeling hopeless most or all of the time	147	78	53%
Lifetime traumatic experience	148	133	90%
Suicidality, past 30 days			
Participants who attempted suicide	140	53	38%
Participants who attempted suicide more than once	140	<11	--
Average number of days participant considered suicide	136	13 days	
Median number of days participant considered suicide	136	10 days	

-- Numbers below 11 were suppressed to protect participant confidentiality in accordance with HCA's Small Numbers Standard.

[5] Although all participants screened positive for suicidality prior to conducting the intake survey, for some clients the intake survey was conducted more than 30 days after their initial screening. Consequently, the intake survey may not reflect suicidal ideation responses in alignment with an acute episode of suicidality.

Pre-Post Outcomes

Fifty-seven participants completed both baseline (pre) and follow-up (post) interviews. The average time between interviews was 4.9 months and ranged from 1.1 to 11.7 months. For this analysis, the pre-period represents the 30 days prior to the baseline interview and the post-period represents the 30 days prior to the follow-up interview. Participants completing both baseline and follow-up interviews appeared to experience significant self-reported improvements in nearly all pre-post measures considered (Table 3). Outcomes are descriptive only due to the absence of a comparison group.

TABLE 3.

Pre-Post Comparisons for Participants with Completed Baseline and Follow-Up Surveys

Self-Reported Health Indicators and Health Barriers, past 30 days	Non-Missing Responses	Baseline	Follow-Up	Percent Change
Total baseline surveys	57			
Participants who attempted suicide	52	40%	0%	-100%*
Participants who attempted suicide more than once	52	--		
Average number of days participant considered suicide	50	13 days	2 days	-85%*
Mental illness indicated	56	71%	<20%	->70%*
Hospitalization for psychiatric reason	55	71%	<20%	->70%*
ED visit for emotional or psychiatric reason	56	66%	<20%	->70%*
Substance misuse indicated	56	57%	39%	-31%*
Inpatient treatment or detox stay	56	--	0%	-100%
Daily or almost daily substance use (excludes tobacco)	56	21%	<20%	->5%
Any Illicit drug use (including marijuana)	56	46%	38%	-19%
Binge drinking	53	32%	<20%	->38%*
Not stably housed	57	42%	23%	-46%*
Not employed, in school, or retired	57	58%	51%	-12%
Recent criminal legal involvement	57	--	0%	-100%
Recent physical abuse	57	--	<20%	-50%
Not socially connected	56	59%	41%	-30%*
Not functioning in everyday life	57	84%	37%	-56%*
Quality of life poor or very poor	57	42%	<20%	->70%*
Overall health fair or poor	57	56%	33%	-41%*
Feeling hopeless most or all of the time	56	55%	<20%	->70%*

-- Numbers below 11 were suppressed to protect participant confidentiality in accordance with HCA's Small Numbers Standard.
* Significant at the level $p<0.05$ (according to chi square test of independence or paired t-test)

- **Suicidality.** While 40 percent of participants attempted suicide in the pre-period, none reported suicide attempts in the 30 days prior to follow-up. Similarly, days of self-reported suicidal ideation fell from an average of 13 days (out of 30) in the pre-period to 2 days in the post-period.
- **Mental Illness and Recent Hospitalization or ED Visit.** The number of participants experiencing psychiatric-related hospitalization or ED visits decreased by more than 70 percent.
- **Quality of Life.** All measures related to quality of life improved significantly. The number of participants experiencing hopelessness fell by more than 70 percent, and the number of participants reporting their overall health was fair or poor fell by 41 percent. Similarly, there was a

greater than 70 percent decrease in the number of participants reporting their quality of life as poor or very poor. Functioning and social connectedness increased by 56 percent and 30 percent, respectively.

- **Substance Misuse.** The percentage of participants reporting any substance misuse decreased 31 percent from baseline to follow-up. Participants self-reporting binge drinking decreased more than 38 percent by the post-period. Other measures indicating substance misuse such as *use of illicit substances* and *daily or almost daily use* declined, but these changes were not statistically significant. No participants reported *inpatient or detox stay* at follow-up.
- **Housing Instability and Unemployment.** Self-reported housing instability declined from 42 percent at baseline to 23 percent at follow-up. There was also a 12 percent—but not statistically significant—reduction in the share of participants who were unemployed (and not enrolled in school or retired).

Note that these pre-post comparisons of outcomes may exaggerate the impact of the program. Participants' natural recovery process from an acute psychiatric episode should be considered when interpreting these outcomes. The results reported here also reflect the experiences of participants who completed both baseline and follow-up interviews, which was a small proportion (25 percent) of program participants. Individuals who completed both interviews may have been more likely to remain engaged in the program or had unobserved characteristics that predisposed them to better outcomes.

There were relatively few observed differences between participants included in the pre-post analysis and the broader study population. However, the pre-post group was significantly different with respect to sexual orientation (e.g. more likely to identify as heterosexual) and included a higher percent of participants referred from the domestic violence services site. Additionally, the pre-post group was significantly less likely to experience psychiatric hospitalization, a psychiatric-related ED visit, or to have used illicit drugs at baseline than those who completed only a baseline interview (see Table 2 vs. Table 3, differences were significant at $p < .05$ with Chi-square tests of independence). While promising, these pre-post findings should be interpreted with caution.

Summary

In anticipation of elevated suicide risk due to the COVID-19 pandemic, the Emergency Response for Suicide Prevention (ERSP) Peer Navigator program provided evidence-based suicide prevention services to 232 participants from December 2020 to January 2022. The program, funded by an $800,000 SAMHSA grant, referred individuals who screened positive for suicidality at participating Emergency Departments (EDs), psychiatric inpatient facilities, and a domestic violence services site to Peer Navigators with lived experience of suicidality. Peers provided evidence-based, individualized support services and care coordination for participants discharged from five sites in King and Stevens counties. Participants were also offered a digital health tool called Jaspr Health™, an application that provides access to on-demand evidence-based suicide supports.

Pre-post analysis of 57 participants who completed structured interviews at baseline and at follow-up (an average of 5-months after baseline) revealed significant improvements over a range of relevant outcomes: suicidality, mental health, substance misuse, housing, and quality of life. While 40 percent of participants reported recent (prior 30 days) suicide attempts at baseline, no participants reported a recent attempt in the follow-up period.

While promising, these results should be interpreted with caution. The pre-post descriptive analysis presented here did not employ a statistically similar comparison group necessary to attribute outcomes to the services provided under this intervention. As a result, it is not possible to confidently exclude other factors that may have influenced participant outcomes, such as unobserved participant characteristics in motivation and willingness to participate in the program and complete interviews, or

normal recovery trajectories for people in the wake of an acute suicidal episode. The issue may be compounded by lower re-interview rates among more vulnerable, higher-acuity populations (e.g., individuals with higher baseline rates of psychiatric inpatient utilization, ED utilization, and illicit substance use who did not complete follow-up interviews). Additionally, all measure were self-reported, so measures such as hospitalizations and ED visits in the post-period were not verified using administrative data. Identifying if any participants died by suicide using administrative data was also beyond the scope of this analysis. Finally, information on which participants actually used the Jaspr Health™ digital application was not available for this analysis, making it difficult to isolate the effect of the Peer Navigator services on participant wellbeing. To examine the effectiveness of this intervention, future efforts should focus on improving the rate of completed follow-up interviews and incorporate a comparison group design by assignment or by employing quasi-experimental methods to create a sample of similar individuals who were not enrolled in the program.

TECHNICAL NOTES

DATA SOURCE

All measures are from the SAMHSA Center for Mental Health Services (CMHS) National Outcome Measures (NOMS) Client-Level Measures for Discretionary Programs Providing Direct Services: Services Tool for Adult Programs, OMB No. 0930-0285. This is a structured survey required to be collected by CMHS grantees at baseline, reassessment, and discharge with each participant receiving direct services funded by the grant.

MEASURE DETAILS

Binge Drinking. "Yes" if the participant reported drinking, in the past 30 days, either 5 or more drinks in a day if they are male, or 4 or more drinks in a day if they are not male.

Criminal Legal Involvement. "Yes" if the participant reported any arrest in the past thirty days.

Education. The highest level of education out of the following options: less than 12th grade, 12th grade, high school diploma or equivalent (GED), vocational/technical diploma, some college or university, bachelor's degree, some graduate school or graduate degree.

Employment. For the purpose of this analysis, respondents were considered unemployed if they were not working full- or part-time and at the same time were not disabled, enrolled in school, or retired.

Experienced Physical Violence. "Yes" if the participant responded affirmatively to the question, "In the past 30 days, how often have you been hit, kicked, slapped, or otherwise physically hurt?"

Feeling Hopeless: "Yes" if they responded "all of the time" or "most of the time" to the question, "During the past 30 days, about how often did you feel hopeless?"

Has a Stable Place To Live. Respondents were asked, "In the past 30 days, where have you been living most of the time?" They were considered "stably housed" if they reported one of the following: owned or rented a house, apartment, trailer, or room; group home; nursing home; veteran's home; or military base. They were considered "unstably housed" if they reported the following: someone else's house, apartment, trailer, or room; homeless (shelter, street/outdoors, park); transitional living facility; hospital (medical or psychiatric); detox/inpatient or residential substance abuse treatment facility; correctional facility (jail/prison); other housed (specify).

Lifetime Traumatic Experience. "Yes" if the participant responded affirmatively to the question, "Have you ever experienced violence or trauma in any setting (including community or school violence; domestic violence; physical, psychological, or sexual maltreatment/assault within or outside of the family; natural disaster; terrorism; neglect; or traumatic grief)?"

Not Functioning in Everyday Life. Participants were considered to be "not functioning in everyday life" with a mean response of less than 3.5 on a (1-5) Likert scale regarding the following past-30-day questions: "I deal effectively with daily problems; I am able to control my life; I am able to deal with a crisis; I am getting along with my family; I do well in social situations; I do well in school and/or work; my housing situation is satisfactory; my symptoms are not bothering me".

Not Socially Connected. Participants were considered to be "not socially connected" with a mean response of less than 3.5 on a (1-5) Likert scale regarding the following questions: "I am happy with the friendships I have; I have people with whom I can do enjoyable things; I feel I belong in my community; in a crisis, I would have the support I need from family or friends".

Suicide Attempt. "Yes" if they provided a non-zero number (specified in the survey's supporting documents to be in the form of days) to the question, "In the past thirty days, how many times did you attempt to kill yourself?"

Suicide Ideation. "Yes" if they provided a non-zero number (specified in the survey's supporting documents to be in the form of days) to the question, "In the past thirty days, how many times did you think about killing yourself?"

Used Illicit Drugs. "Yes" if the participant reported any past-30-day use of cannabis (considered illicit because it is illegal under federal law), cocaine, (misuse of) prescription stimulants, methamphetamine, inhalants, (misuse of) sedatives or sleeping pills, hallucinogens, street opioids, (misuse of) prescription opioids, or a specified other drug that was either illegal or misused.

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