Variable ^a	Before matching				After matching			
	Ambulatory $(n=72053)$	Residential $(n=12688)$	Statistic ^c	P-value	Ambulatory $(n=11226)$	Residential $(n=11226)$	Statistic ^c	P-value
First substance used n(%)			1478.81	< 0.001		,	0	1.000
Alcohol	41,391 (57.4)	5066 (39.9)			4703 (41.9)	4703 (41.9)		
Cocaine hydrochloride	2948 (4.1)	522 (4.1)			476 (4.2)	476 (4.2)		
Cocaine paste	7647 (10.6)	2227 (17.6)			1842 (16.4)	1842 (16.4)		
Marijuana	18,403 (25.5)	4555 (35.9)			3919 (34.9)	3919 (34.9)		
Others	1664 (2.3)	318 (2.5)			286 (2.5)	286 (2.5)		
Primary Substance at Admission n(%)	()	()	3931.73	< 0.001			0	1.000
Alcohol	26,286 (36.5)	2418 (19.1)	0,011,0	0,001	2321 (20.7)	2321 (20.7)	ŭ	1,000
Cocaine hydrochloride	14,473 (20.1)	1658 (13.1)			1602 (14.3)	1602 (14.3)		
Cocaine paste	24,556 (34.1)	8018 (63.2)			6716 (59.8)	6716 (59.8)		
Marijuana	5362 (7.4)	392 (3.1)			391 (3.5)	391 (3.5)		
Others	1376 (1.9)	202 (1.6)			196 (1.7)	196 (1.7)		
Marital Status n(%)	1570 (1.5)	202 (1.0)	948 67	< 0.001	150 (1.7)	150 (1.7)	0	1.000
Married/Shared living arrangements	26,151 (36.3)	2910 (22.9)	740.07	· 0.001	2710 (24.1)	2710 (24.1)	O	1.000
Separated/Divorced	7709 (10.7)				1193 (10.6)	1193 (10.6)		
Single		1317 (10.4)				, ,		
_	37,330 (51.8)	8330 (65.7)			7207 (64.2)	7207 (64.2)		
Widower	863 (1.2)	131 (1.0)	1.60.71	-0.001	116 (1.0)	116 (1.0)	0	1.000
Educational Attainment n(%)	21.051.(20.2)	4560 (26.0)	169./1	< 0.001	2050 (24.5)	2070 (24.5)	0	1.000
Completed primary school or less	21,851 (30.3)	4568 (36.0)			3878 (34.5)	3878 (34.5)		
Completed high school or less	37,191 (51.6)	6137 (48.4)			5488 (48.9)	5488 (48.9)		
More than high school	13,011 (18.1)	1983 (15.6)			1860 (16.6)	1860 (16.6)		
Primary Substance at Admission Usage Frequency n(%)			5230.67	< 0.001			0	1.000
Did not use	5323 (7.4)	271 (2.1)			271 (2.4)	271 (2.4)		
Less than 1 day a week	22,312 (31.0)	1328 (10.5)			1324 (11.8)	1324 (11.8)		
1 day a week or more	12,212 (16.9)	1650 (13.0)			1589 (14.2)	1589 (14.2)		
2 to 3 days a week	28,255 (39.2)	9223 (72.7)			7826 (69.7)	7826 (69.7)		
4 to 6 days a week	1095 (1.5)	84 (0.7)			84 (0.7)	84 (0.7)		
Daily	2856 (4.0)	132 (1.0)			132 (1.2)	132 (1.2)		
Treatment Admission Motive n(%)			3822.86	< 0.001			0	1.000
Spontaneous	33,627 (46.7)	4274 (33.7)			4084 (36.4)	4084 (36.4)		
Assisted Referral	4932 (6.8)	3004 (23.7)			2036 (18.1)	2036 (18.1)		
Justice Sector	3749 (5.2)	736 (5.8)			719 (6.4)	719 (6.4)		
Health Sector	7137 (9.9)	810 (6.4)			780 (6.9)	780 (6.9)		
Other	22,608 (31.4)	3864 (30.5)			3607 (32.1)	3607 (32.1)		
Psychiatric Comorbidity n(%)	, , ,	,	993.83	< 0.001	,	. ,	0	1.000
Without psychiatric comorbidity	28,994 (40.2)	3245 (25.6)			2984 (26.6)	2984 (26.6)		
Diagnosis unknown (under study)	13,260 (18.4)	2766 (21.8)			2437 (21.7)	2437 (21.7)		
With psychiatric comorbidity	29,799 (41.4)	6677 (52.6)			5805 (51.7)	5805 (51.7)		
Regional Location of Center n(%)	25,755 (11.1)	0077 (52.0)	1794.62	< 0.001	3003 (31.7)	3003 (31.7)	0	1.000
Arica (15)	1312 (1.8)	728 (5.7)	1774.02	\0.001	610 (5.4)	610 (5.4)	O	1.000
Tarapacá (01)	1348 (1.9)	593 (4.7)			413 (3.7)	413 (3.7)		
Antofagasta (02)					676 (6.0)	676 (6.0)		
	2290 (3.2)	697 (5.5)				` /		
Atacama (03)	1829 (2.5)	262 (2.1)			262 (2.3)	262 (2.3)		
Coquimbo (04)	2798 (3.9)	270 (2.1)			270 (2.4)	270 (2.4)		
Valparaíso (05)	5350 (7.4)	1165 (9.2)			1146 (10.2)	1146 (10.2)		
Metropolitana (13)	35,959 (49.9)	6251 (49.3)			5522 (49.2)	5522 (49.2)		
O'Higgins (06)	3636 (5.0)	567 (4.5)			506 (4.5)	506 (4.5)		
Maule (07)	4202 (5.8)	642 (5.1)			494 (4.4)	494 (4.4)		
Nuble (16)	539 (0.7)	20 (0.2)			20 (0.2)	20 (0.2)		
Biobío (08)	5089 (7.1)	703 (5.5)			530 (4.7)	530 (4.7)		
Araucanía (09)	2221 (3.1)	161 (1.3)			159 (1.4)	159 (1.4)		
Los Ríos (14)	1110 (1.5)	185 (1.5)			184 (1.6)	184 (1.6)		



Table 1 (continued)

Variable ^a	Before matching				After matching			
	Ambulatory	Residential	Statistic ^c	P-value	Ambulatory	Residential	Statistic ^c	P-value
	(n=72053)	(n=12688)			(n=11226)	(n=11226)		
Los Lagos (10)	2644 (3.7)	373 (2.9)			363 (3.2)	363 (3.2)		
Aysén (11)	798 (1.1)	40 (0.3)			40 (0.4)	40 (0.4)		
Magallanes (12)	928 (1.3)	31 (0.2)			31 (0.3)	31 (0.3)		
Drug Dependence Diagnosis (ICD-10) $n(\%)$	49,981 (69.4)	11,643 (91.8)	2727.92	< 0.001	10,203 (90.9)	10,203 (90.9)	0	1.000
Type of Center (Public vs. private) n(%)	57,099 (79.2)	3615 (28.5)	13680.34	< 0.001	3615 (32.2)	3615 (32.2)	0	1.000
Sex (Women) n(%)	17,392 (24.1)	3935 (31.0)	270.81	< 0.001	3474 (30.9)	3474 (30.9)	0	1.000
Employment Status n(%)			9213.85	< 0.001			0	1.000
Employed	39,513 (54.8)	1769 (13.9)			1765 (15.7)	1765 (15.7)		
Inactive	7667 (10.6)	1190 (9.4)			1164 (10.4)	1164 (10.4)		
Looking for a job for the first time	172 (0.2)	21 (0.2)			21 (0.2)	21 (0.2)		
No activity	2663 (3.7)	1819 (14.3)			1372 (12.2)	1372 (12.2)		
Not seeking for work	493 (0.7)	335 (2.6)			269 (2.4)	269 (2.4)		
Unemployed	21,545 (29.9)	7554 (59.5)			6635 (59.1)	6635 (59.1)		
Tenure status of household n(%)			443.47	< 0.001			0	1.000
Stays temporarily with a relative	29,950 (41.6)	5542 (43.7)			5042 (44.9)	5042 (44.9)		
Owner/Transferred dwellings/Pays Dividends	26,710 (37.1)	4786 (37.7)			4110 (36.6)	4110 (36.6)		
Renting	12,896 (17.9)	1642 (12.9)			1532 (13.6)	1532 (13.6)		
Illegal Settlement	591 (0.8)	308 (2.4)			195 (1.7)	195 (1.7)		
Others	1906 (2.6)	410 (3.2)			347 (3.1)	347 (3.1)		
Admission Age (Q2 [Q1, Q3])	34 [28, 43]	33 [26, 41]	18.84	< 0.001	32 [26, 40]	33 [27, 41]	-3.13	0.002
Admission Date (Q2 [Q1, Q3]) ^b	16,578 [15730, 17359]	16,153 [15342, 17023]	30.36	< 0.001	16,365 [15470, 17257]	16,128 [15323, 16988]	12.83	< 0.001
Substance Use Onset Age (Q2 [Q1, Q3])	15 [14, 18]	15 [14, 18]	9.18	< 0.001	15.0 [13, 17]	15 [13, 17]	0.01	0.996
Number of readmissions			1430.40	< 0.001			572.13	< 0.001
0	58,520 (81.2)	8518 (67.1)			7500 (66.9)	5749 (51.2)		
1	10,068 (14.0)	2798 (22.1)			2631 (23.4)	3742 (33.3)		
2	2463 (3.4)	926 (7.3)			788 (7.0)	1207 (10.8)		
3	715 (1.0)	298 (2.3)			238 (2.1)	397 (3.5)		
4 or more	287 (0.4)	148 (1.2)			69 (0.6)	131 (1.2)		

^a For categorical variables, frequencies (n) and percentages (%) in parenthesis; For continuous variables, median (Q2) and percentiles 25 (Q1) and 75 (Q3) in brackets

Transition probabilities

We compared the transition probabilities of two hypothetical patients in baseline residential and ambulatory treatments at selected time points, shown in Table 2 as percentages. Patients in residential settings had higher probabilities of completing baseline treatment than in ambulatory settings at all time points. Patients in residential settings had 3.4-6.4% greater probabilities of completing treatment than in ambulatory settings. Differences in probabilities of a first readmission were greater among those who did not complete treatment (e.g., at three months: 8.0%, 95% CI: 6.7%,

9.3%) than among those who completed (5.7% at three months: 95% CI: 4.4, 7.0).

Transition probabilities were almost identical across settings in subsequent transitions (e.g., no differences from first readmission to the second readmission) regardless of baseline completion status (Table 2). The exception was the transition from the second to the third readmission for patients who did not complete treatment, in which patients in residential treatment had higher probabilities of a third readmission at one, three and five years of follow-up (lowest differences of 3.7; 95% CI: 0.2, 7.3 at one year). Differences at 180 equally spaced times between 90 and 1826 days of follow-up are represented in Fig. 3.



^b The number of days passed since January 1, 1970

 $^{^{}c}$ t=Student's t-test critical value (for continuous variables); χ^{2} = Chi-square test critical value (for categorical variables)

Table S1. Description of patient characteristics at baseline used to balance the sample

Covariate name	Description
First substance used	Recorded by the therapeutic team and indicated by patients as the drug use onset substance. The system allowed for submitting up to three starting substances. Other substances such as hallucinogens (such as LSD, mushrooms); amphetamine-type stimulants (e.g., methamphetamine, ecstasy); inhalants; opioids (e.g., heroin, dmethadone, painkillers); sedatives, hypnotics, and tranquilizers; and others (such as anabolic steroids), did not cover more than the 3% of the answers, thus, were categorized as "Others". We kept the more vulnerable category for patients that reported more than one value ("Paste Base">"Cocaine hydrochloride">"Marijuana">"Alcohol">"Others").
Marital status	A single question asking for <i>de facto</i> marital status, with mutually exclusive categories (i.e., the most recent status predominates over the previous). We collapsed the categories into Married/Shared living arrangements, Separated/Divorced, Single and widower.
Educational attainment	The last or the highest educational level completed by the patient. Categories were "Completed primary school or lower", "Completed high school or lower", and "More than high school". In the case of more than one value in continuous treatments, we kept the more vulnerable category if available.
Substance use onse	et Refers to patients' age when they started using.
age	Days of use in the last 30 days before treatment of the primary substance at admission.
Primary substance use frequency	Categories considered: "Less than 1 day per week", "1 day per week", "2-3 days per week", "4-6 days per week", and "Daily". If available, we kept the more vulnerable category for continuous treatments with more than one value.
Treatment admission motive	Collapsed treatment admission motive into the following values: spontaneous consultation, health center referral (primary health care level or others from the private and public health network), referral from a SUD treatment center (or other substance use-related programs such as FONODROGAS), stated from the judicial system (often mandated by guarantee courts, family courts, or other attorneys' offices), and other (such as the educational system, work, or social services not related to justice and health). If available, we kept the minimum or the first value for continuous treatments with more than one value. According to the ICD-10 (International Classification of Diseases 10 th Edition) classification. The system allowed for submitting up to three psychiatric conditions. For
	continuous treatments, we kept the more vulnerable value if available. A clinical diagnosis of comorbidity can take up to 2 months of patients' observation and abstinence. The comorbidities contemplated here are categorized as follows:
Psychiatric comorbidity	Schizophrenia, schizotypal, and delusional disorders (F20-29) (3.1%), Intellectual disabilities (F70-79) (1.1%), Eating disorders (F50) (0.2%), Disorders of adult personality and behavior (F60-69) (38.5%), Habit and impulse disorders (F63) (5.3%), Behavioral syndromes associated with physiological disturbances and physical factors (F50-59) (0.5%), Disorders of psychological development (F80-89) (0.4%), Mood [affective] disorders (F30-39) (13.8%), Organic, including symptomatic, mental disorders (F00-09) (2.3%), Neurotic, stress-related, and somatoform disorders (F40-49) (1.6%), Behavioral and emotional disorders with onset usually occurring in childhood and adolescence (F90-98) (2.3%), In study (-) (31%).

Regional location of Administrative Chilean region of the center at admission time. If available, we kept the the center maximum or the last value for continuous treatments with more than one values.

Drug dependence diagnosis

Secondary substance use disorder according to the ICD-10 classification. Available values were "Drug dependence" or "Hazardous consumption". For continuous treatments, we kept the more vulnerable value if available.

Type of center

Public or private center according to where the patient was admitted. If available, we kept the last value for continuous treatments with more than one value.

Sex

Indicated by patients at admission. Can adopt the following values: "woman" or "man".

Admission age

Patient age when admitted to treatment. If available, we kept the minimum or the first value for continuous treatments with more than one value.

Treatment admission date

The date of admission to treatment is coded as the number of days passed since January 1, 1970. We kept the minimum or the first value for continuous treatments if available.

Primary (or main) substance

Recorded by the therapeutic team and defined as the substance identified by patients as causing more problems at admission, or the main substance of concern. If available, we kept the value of the largest treatment for continuous treatments with more than one value.

Tenure status of households

Housing at the time of admission, which considers the following categories: "Stays temporarily with a relative", "Renting", "Illegal settlement", "Owner/Transferred dwellings/Pays mortgage", and "Others", which considers other housing conditions not included in the previous categories.

Employment status (of the largest treatment)

A single question asking whether the respondent worked at least one hour the last week without considering care work at home. If the respondent answered affirmatively, we coded them as "employed" if the respondent answered negatively, we distinguished between those that were looking for a job for the first time, unemployed (looking but not being able to find one), not seeking work, inactive or without any activity (studying but not working, permanently unable to work, pensioned or retired but not working, rentier or lessor that perceives an income from properties or investments, household chores, other reason) and no activity (respondents that only indicated not having any activity). In case of more than one value in continuous treatments, we kept the value of the most extensive treatment if available.