

Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.

eTable 1. Substance Use Screening in Adolescents by Clinician Specialty, US, 2022

Clinician characteristic	Total	Family Practitioner	Internist	Pediatrician	Nurse Practitioner	Physician Assistant
Total	1047	467	132	250	107	91
Screening for substance use and SUDs in adolescents						
Screen at every well visit	596 (56.92)	264 (56.53)	64 (48.48)	173 (69.20)	60 (56.07)	35 (38.46)
At every visit regardless of purpose	88 (14.77)	25 (9.47)	10 (15.63)	18 (10.40)	26 (43.33)	9 (5.87)
Do not screen at every well visit	451 (43.08)	203 (43.47)	68 (51.52)	77 (30.80)	47 (43.93)	56 (61.54)
At an initial visit	134 (29.71)	58 (28.57)	27 (39.71)	13 (16.88)	19 (40.43)	17 (30.36)
At intermittent well visits	154 (34.15)	88 (43.35)	21 (30.88)	23 (29.87)	13 (27.66)	9 (16.07)
If there are concerns about risky behaviors or when a parent/guardian raises concerns	275 (60.98)	141 (69.46)	33 (48.53)	50 (64.94)	28 (59.57)	23 (41.07)
I never screen for SUD in adolescents	62 (13.75)	10 (4.93)	11 (16.18)	12 (15.58)	9 (19.15)	20 (35.71)
Screening tool use to screen for SUDs in adolescents (n=985)						
Yes ^a	622 (63.15)	257 (56.24)	78 (64.46)	169 (71.01)	71 (72.45)	47 (66.20)
Screening to Brief Intervention (S2BI)	232 (37.30)	101 (39.30)	49 (62.82)	25 (14.79)	38 (53.52)	19 (40.43)
Brief Screener for Tobacco, Alcohol, and other Drugs (BSTAD)	50 (8.04)	16 (6.23)	15 (19.23)	4 (2.37)	10 (14.08)	5 (10.64)
Car; Relax; Alone; Forget; Friends; Trouble (CRAFT)	189 (30.39)	61 (23.74)	15 (19.23)	85 (50.30)	18 (25.35)	10 (21.28)
Tobacco, Alcohol, Prescription medication, and other Substance use tool (TAPS)	94 (15.11)	37 (14.40)	25 (32.05)	10 (5.92)	18 (25.35)	4 (8.51)
Other tool developed by clinician's practice	176 (28.30)	85 (33.07)	11 (14.10)	47 (27.81)	17 (23.94)	16 (34.04)
Other tool, name not mentioned	82 (13.18)	33 (12.84)	5 (6.41)	22 (13.02)	12 (16.90)	10 (21.28)
No [I do not use a screening tool]	363 (36.85)	200 (43.76)	43 (35.54)	69 (28.99)	27 (27.55)	24 (33.80)
Concordance with recommended screening practices*						
Yes, screens at every well visit and uses a screening tool	411 (39.26)	169 (36.19)	47 (35.61)	125 (50.00)	45 (42.06)	25 (27.47)
No	636 (60.74)	298 (63.81)	85 (64.39)	125 (50.00)	62 (57.94)	66 (72.53)

eTable 1. Substance Use Screening in Adolescents by Clinician Specialty, US, 2022 (continued)

Clinician characteristic	Total	Family Practitioner	Internist	Pediatrician	Nurse Practitioner	Physician Assistant
Total	1047	467	132	250	107	91
Screening, Brief Intervention, and Referral to Treatment (SBIRT)^a						
I provide screening	641 (61.22)	291 (62.31)	89 (67.42)	156 (62.40)	64 (59.81)	41 (45.05)
I provide brief intervention	461 (44.03)	238 (50.96)	70 (53.03)	81 (32.40)	48 (44.86)	24 (26.37)
I provide referral to treatment	710 (67.81)	336 (71.95)	78 (59.09)	179 (71.60)	70 (65.42)	47 (51.65)
I provide screening, brief intervention, and referral to treatment	321 (30.66)	165 (35.33)	43 (32.58)	56 (22.40)	41 (38.32)	16 (17.58)
I do not provide any of the above for SUD	128 (12.23)	37 (7.92)	15 (11.36)	27 (10.80)	19 (17.76)	30 (32.97)
Consent required to provide screening for patients under 18 years old for OUD						
Parental consent only required	137 (13.09)	72 (15.42)	16 (12.12)	22 (8.80)	15 (14.02)	12 (13.19)
Minor consent only required	118 (11.27)	42 (8.99)	18 (13.64)	48 (19.20)	4 (3.74)	6 (6.59)
Either parental or minor consent required	119 (11.37)	61 (13.06)	22 (16.67)	21 (8.40)	9 (8.41)	6 (6.59)
Both parental and minor consent required	238 (22.73)	120 (25.70)	30 (22.73)	26 (10.40)	41 (38.32)	21 (23.08)
No specific consent requirements	435 (41.55)	172 (36.83)	46 (34.85)	133 (53.20)	38 (35.51)	46 (50.55)

^aData do not add to 100% because respondents were instructed to select all response choices that apply.

Abbreviations: SUD, substance use disorder; OUD, opioid use disorder.

eTable 2. Associations Between Screening Tool Use and Screening for Substance Use and Substance Use Disorders at Every Well Visit

Screening tool use	Screening for substance use and SUDs at every well visit			
	Yes	No	OR (95% CI)	P value
Any tool ^a				
Yes	411 (68.96)	211 (54.24)	1.87 (1.44-2.44)	<.0001
No	185 (31.04)	178 (45.76)		
Common standardized tool ^b				
Yes	291 (48.83)	146 (32.37)	1.99 (1.55-2.57)	<.0001
No	305 (51.17)	305 (67.63)		

Abbreviations: SUDs, substance use disorders; OR, odds ratio; CI, confidence interval.

^aUse of “any” screening tool to screen for SUDs in adolescents was defined as endorsing use of at least one of the following response options: 1) Screening to Brief Intervention (S2BI) 2) BSTAD (Brief Screener for Tobacco, Alcohol, and other Drugs) 3) CRAFFT (Car; Relax; Alone; Forget; Friends; Trouble) (4) TAPS (Tobacco, Alcohol, Prescription medication, and other Substance use Tool) 5) other tool developed by clinician’s practice 6) other tool not mentioned.

^b“Common standardized tool” included endorsing use of at least one of the following: 1) S2BI 2) BSTAD 3) CRAFFT 4) TAPS

eTable 3. Multivariable Logistic Regression Model Examining Associations of Youth-Serving Clinicians' Characteristics With Reporting Concordance With Recommended Screening Practices

Clinician characteristic		Total (n=1047)	
		Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Sex			
	Female	1.35 (1.04-1.74)	1.21 (0.96-1.59)
	Male	Reference	Reference
Age (years)			
	23 to 39	3.13 (2.02-4.86)	2.80 (1.27-6.14)
	40 to 49	2.51 (1.66-4.01)	2.46 (1.17-4.78)
	50 to 59	2.03 (1.25-3.29)	2.11 (1.27-3.50)
	60 and older	Reference	Reference
Race			
	White	Reference	Reference
	Black or African American	1.43 (0.76-2.68)	1.01 (0.51-2.00)
	Asian	1.01 (0.73-1.40)	0.82 (0.58-1.16)
	Others	0.88 (0.48-1.34)	0.64 (0.37-1.15)
Main work setting			
	Individual outpatient practice	Reference	Reference
	Group outpatient practice	1.46 (1.05-2.04)	1.38 (0.96-1.97)
	Inpatient practice	1.32 (0.85-2.05)	0.88 (0.54-1.44)
Years of practice			
	3 to 4	2.23 (1.41-3.53)	1.92 (0.88-4.19)
	5 to 8	1.76 (1.25-2.46)	1.22 (0.60-2.49)
	9 to 14	1.60 (1.13-2.27)	1.15 (0.62-2.11)
	15 to 19	1.32 (0.85-2.05)	0.94 (0.53-1.67)
	20+	Reference	Reference
Metro			
	Urban	Reference	Reference
	Suburban	1.20 (0.80-1.79)	0.89 (0.66-1.21)
	Rural	0.99 (0.67-1.47)	0.91 (0.59-1.41)
Relevance of Skills in Diagnosis and Treatment of SUDs in Adolescents to your Practice			
	Extremely relevant or Relevant	4.90 (2.92-8.34)	3.69 (2.03-6.77)
	Somewhat relevant	2.86 (1.64-5.0)	2.35 (1.28-4.33)
	Not relevant at all	Reference	Reference
# Patients with SUD Per Month			
	0	Reference	Reference
	1-5	2.08 (1.44-3.01)	1.50 (0.97-2.32)
	5+	3.33 (2.28-4.87)	2.19 (1.30-3.71)

eTable 3. Multivariable Logistic Regression Model Examining Associations of Youth-Serving Clinicians' Characteristics With Reporting Concordance With Recommended Screening Practices (continued)

Clinician characteristic	Total (n=1047)	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
# Patients with OUD Per Month		
0	Reference	Reference
1-5	1.55 (1.16-2.07)	1.12 (0.79-1.59)
5+	1.95 (1.38-2.74)	1.06 (0.66-1.72)

Abbreviations: OR, odds ratio; CI, confidence interval; SUD, substance use disorder; OUD, opioid use disorder.