

OPEN

Linkage to Treatment and Recovery Support Services for Patients with a Substance Use Disorder: A Survey of Kentucky Physicians

Seif Atyia, MD,^{1,2} Terry Bunn, PhD,^{1,2,3} Dana Quesinberry, JD, DrPH,^{1,2,4} and Timothy Prince, MD, MSPH^{2,3}

Objective: The purpose of this study was to survey current physicians in Kentucky to evaluate their management of patients with substance use disorder (SUD), with a focus on the identification of their referral methods for linkage to SUD treatment and recovery support services.

Methods: A cross-sectional study was performed through a developed survey that was administered by e-mail to all 12,152 in-state physicians licensed in Kentucky; 524 responded. Addiction specialists, emergency physicians, and psychiatrists were categorized separately; family medicine and internal medicine (FM/IM) physicians were combined into one category; all of the other specialties were grouped into an "Other" category. The results were analyzed using descriptive statistics and cross-tabulations.

Results: Of the 524 respondents, 271 (52%) said that they treated patients with SUD. Despite this, approximately 30% of them said that they do not screen for SUD. Across all specialties (except for addiction and psychiatry), many providers refer patients with SUD to treatment without prescribing any kind of treatment themselves. FM/IM physicians have a similar percentage to both addiction specialists and psychiatrists when analyzing the number of their patients who are willing to accept treatment; however, only approximately 30% of FM/IM physicians know about Kentucky's treatment and recovery placement Web site with near-real-time vacancies by geographic location with multiple filter options called FindHelpNowKY.org.

Conclusions: There are gaps in screening and linkage to care, especially in internal medicine and family medicine physicians. Work is necessary to increase screening, build provider capacity to treat, and increase knowledge of SUD treatment and recovery resources in Kentucky.

Key Words: linkage to care, physician survey, substance use disorder, treatment and recovery resources

(*South Med J* 2025;118:1–8)

From the ¹Kentucky Injury Prevention and Research Center, the ²University of Kentucky College of Public Health, the ³Department of Epidemiology and Environmental Health, the ⁴Department of Health Management and Policy, Lexington, Kentucky.

Correspondence to Dr Seif Atyia, Kentucky Injury Prevention and Research Center, 2365 Harrodsburg Rd, Suite 475, Lexington, KY 40504. E-mail: seif.atyia@uky.edu.

This publication was supported by Grant or Cooperative Agreement Number 6NU17CE010186, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the US Department of Health and Human Services.

D.Q. has received compensation from the University of Florida and the Pikeville Medical Center. Apart from the study funding, the remaining authors did not report any financial relationships or conflicts of interest.

Accepted August 13, 2024.

Copyright © 2024 The Author(s). Published Wolters Kluwer Health, Inc. on behalf of the Southern Medical Association. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

ISSN: 1541-8243

DOI: 10.14423/SMJ.0000000000001774

Many people with substance use disorders (SUDs) in the United States are untreated.¹ It is well established that the use of various unprescribed drugs and the misuse of prescriptions are widespread.² In 2019, 65.8 million US adults reported past-month binge drinking, and 35.8 million reported illicit drug use or prescription pain reliever misuse during the past month; 20.4 million met the diagnostic criteria for an SUD during the past year.³ Not including coffee, the most used substance is alcohol, followed by cannabis, and prescription opioid misuse.³ Treatment can be effective for these individuals, but many are never connected to recovery support services and resources.⁴ This highlights the importance of understanding the process of linkage to treatment and recovery support services as an important aspect in the overall care of these patients with an SUD. This connection can occur at multiple steps, including initial contact during primary care provision, in the hospital, and in the outpatient setting.

Exploring the barriers to linkage and the willingness of the patient population to accept treatment is important due to the role that these factors play in the connection to recovery support services. As more studies are conducted exploring the social determinants of health, the data show that patients with SUDs have many risk factors that can affect their care. In a cross-sectional study of adults living in the greater Richmond, Virginia area, it was found that the patients with SUDs consistently screened positive for all three of the determinants that were being analyzed: food, transportation, and housing needs.⁵ When struggling with basic needs and handling the ups and downs of substance use, barriers to treatment need to be as low as possible to foster successful recovery. A small group of

Key Points

- Approximately one-third of physician respondents do not screen for substance use disorders (SUDs).
- With the exceptions of addiction and psychiatry specialists, many physician respondents refer patients to SUD treatment without prescribing any treatment themselves.
- Family medicine and internal medicine physician respondents had similar frequencies to addiction and psychiatry specialists for the number of patients willing to accept treatment, but their knowledge of current resources in Kentucky was lower.
- There is a unique opportunity to increase SUD screening and raise awareness of SUD treatment and recovery resources in family medicine and internal medicine physicians in Kentucky to successfully link the SUD patient population to treatment and recovery supports.

emergency physicians started the Houston Emergency Opioid Engagement System, in which they attempted to engage patients with SUDs in the emergency department (ED), which was successful, but they found that lack of insurance was a predictor of treatment failure.⁶ These social determinants of health, unsurprisingly, play a large role in the linkage to care of these patients.

Emergency medical services serves as the first point of contact for many patients with SUDs. One concern is that people receive lifesaving emergency care from ambulance staff, but they then refuse to go on to the hospital and are not connected to further treatment. A pilot study explored the possibility of linking these patients to care through emergency medical services. The authors found that this strategy had a high rate of continuation of outpatient treatment.⁷ A similar team was formed in Ohio in 2015 and then expanded across the state; a recent analysis of data has shown that nearly 12,000 Ohioans have been reached by these first responders since 2017.⁸ This shows the importance of linkage to care for this patient population.

Hospitals often are a point of contact for those who may be experiencing severe negative effects from an SUD such as a drug overdose. Providing resources for these patients in that setting has been undertaken successfully in multiple inpatient settings. Screening patients on their initial presentation to the hospital for SUDs and linking them to care was implemented effectively at Rush Hospital in Chicago, Illinois.⁹ In South Carolina, initiation of linkage coaching services improved engagement with recovery support services for inpatients.¹⁰ When a dedicated addiction consult team was developed in Oregon, they were able to engage patients in treatment for their SUD at a statistically significant higher rate.¹¹ Another opioid use disorder consult service was established in Chicago, which experienced growth in consulting volumes initially because there was a decrease in the readmission rate for those patients who were seen by the service.¹² There body of evidence is growing for the increase in linkage opportunities for patients with SUDs in the hospital.

On the other hand, the evidence for the linkage of patients who present in the outpatient setting is limited. The primary care setting is an opportunity for early intervention rather than waiting until the sequelae of substance use have progressed to the point of requiring hospitalization. A small controlled trial of 266 primary care patients with SUD randomized approximately half of them to receive more frequent visits, called recovery management checkups, and found that this increased their probability of receiving any treatment for SUD.¹³ It is important to note, however, that physician barriers do exist as found in a survey of primary care providers, who responded that most of them see patients with opioid use disorders but that their interest in prescribing buprenorphine was low even after removal of the X-waiver (a certificate obtained by physicians through specific training that was required for the prescribing of medications for opioid use disorder).¹⁴ Further exploration of these barriers used observational field notes and qualitative interviews of primary care clinics ($n = 12$) to determine their generalized attitudes toward SUD treatment and found that they varied among the categories of avoidant ($n = 3$), contemplative ($n = 5$), and responsive ($n = 4$).¹⁵ The barriers to SUD treatment are extensive, which makes reducing them a priority.

Web site platforms in Kentucky were created and maintained to facilitate linking patients to SUD treatment and recovery resources. FindHelpNowKY.org and FindRecoveryHousingNowKY.org fill a critical need for timely access to available SUD treatment slots and recovery housing based on an individual's needs. The Web sites are a valuable resource for health professionals that can "enhance clinical workflow and reduce staff time conducting phone and website searches for available SUD treatment."¹⁶ They provide near-real-time availability of SUD treatment facility openings and recovery house beds based on search criteria such as insurance, gender identity, and type of treatment. This study aims to assess the current treatment and referral practices of Kentucky physicians when presented with a patient who needs treatment for SUD and the providers' knowledge of this Web site.

METHODS

Survey Development

An initial survey was drafted with the goal of identifying current linkage-to-care practices of physicians in Kentucky when seeing patients with SUDs. A knowledge assessment of a current linkage-to-treatment locator Web site, FindHelpNowKY.org, that was developed for the linkage of patients was included in the survey.

Survey Measures

REDCap, a Web-based application with protective security measures for the creation and implementation of surveys, was used for building the survey as well as the collection of responses. The questions asked about current screening practices, percentages of patients who have/present with an SUD, percentage of patients with SUDs who were already being seen by an addiction specialist, and percentage of patients with SUDs who were willing to accept treatment. All percentage questions had response choices of 0% to 25%, 26% to 50%, 51% to 75%, or 76% to 100%. Respondents also were asked whether they generally refer patients to SUD treatment, prescribe medications themselves, or do both. Survey questions related to respondents' knowledge about FindHelpNowKY.org and FindRecoveryHousingNowKY.org also were included with additional follow-up questions about the use of each Web site. Lastly, demographic information (age, sex, and medical specialty) about the providers was collected.

Recruitment and Study Population

Institutional review board approval was obtained from the University of Kentucky in advance of distribution of the survey (protocol no. 90042). The target population of the study was physicians in Kentucky who have an active license with the Kentucky Board of Medical Licensure as a population-based sample. With the help of the Kentucky Board of Medical Licensure, an e-mail was sent through their listserv with a short description of the purpose of the study, the cover letter, and a link to the survey. No incentives were provided to the research participants.

There were 23,488 physicians licensed to practice in Kentucky at the time of this study, and 12,152 were listed as

TABLE 1. Demographics of Kentucky physicians surveyed on linkage to treatment and recovery support services for patients with a substance use disorder, 2023

	Addiction specialists (n = 25)	Emergency medicine physicians (n = 37)	Family and internal medicine physicians (n = 98)	Psychiatrists (n = 41)	Other specialties (n = 57)
Demographic characteristics					
Age, y, n (column %)					
25–39	2 (8.00)	14 (37.84)	28 (28.57)	5 (12.50)	21 (30.00)
40–59	11 (44.00)	10 (27.03)	45 (45.92)	17 (42.50)	27 (38.57)
≥60	11 (44.00)	13 (35.14)	23 (23.47)	17 (42.50)	22 (31.53)
Prefer not to disclose	1 (4.00)	0 (0)	2 (2.04)	1 (2.50)	0 (0)
Missing	0	0	0	1	0
Sex, n (column %)					
Female	9 (36.00)	9 (25.00)	42 (43.30)	16 (41.03)	29 (45.31)
Male	16 (64.00)	27 (75.00)	52 (55.67)	21 (53.85)	34 (53.13)
Prefer not to disclose	0 (0)	0 (0)	1 (1.03)	2 (5.13)	1 (1.56)
Missing	0	0	1	2	6
Do you treat patients with SUD?, n (column %)					
Yes	25 (100)	37 (100)	98 (100)	41 (100)	70 (100)
No	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Missing	0	0	0	0	0
Are your patients screened for SUD?, n (column %)					
Yes	21 (84.00)	28 (75.68)	63 (64.95)	37 (90.24)	52 (74.29)
No	4 (16.00)	9 (24.32)	34 (35.05)	4 (9.76)	18 (25.71)
Missing	0	0	1	0	0
What percentage of your patients have/present with SUD?, n (column %)					
0–25	5 (20.83)	20 (54.05)	74 (79.57)	21 (51.22)	50 (72.46)
26–50	3 (12.50)	14 (37.84)	16 (17.20)	9 (21.95)	14 (20.29)
51–75	2 (8.33)	3 (8.11)	1 (1.08)	6 (14.63)	2 (2.90)
76–100	14 (58.33)	0 (0)	2 (2.15)	5 (12.20)	3 (4.35)
Missing	1	0	5	0	1
What percentage of your patients with SUD are already being treated/seen by an addiction specialist?, n (column %)					
0–25	13 (54.17)	25 (67.57)	70 (72.16)	28 (70.00)	40 (59.70)
26–50	4 (16.67)	9 (24.32)	13 (13.40)	7 (17.50)	15 (22.39)
51–75	1 (4.17)	2 (5.41)	7 (7.22)	3 (7.50)	8 (11.94)
76–100	6 (25)	1 (2.70)	7 (7.22)	2 (5.00)	4 (5.97)
Missing	1	0	1	1	3
What percentage of your patients with SUD are willing to accept treatment for SUD?, n (column %)					
0–25	2 (8.70)	29 (78.38)	40 (41.67)	14 (34.15)	34 (50.00)
26–50	1 (4.35)	6 (16.22)	29 (30.21)	11 (26.83)	14 (20.59)
51–75	6 (26.09)	1 (2.70)	16 (16.67)	7 (17.07)	14 (20.59)
76–100	14 (60.87)	1 (2.70)	11 (11.46)	9 (21.95)	6 (8.82)
Missing	2	0	2	0	2
Do you generally refer your patients to SUD treatment or do you prescribe SUD treatment medications yourself (eg, medications for opioid use disorder)?, n (column %)					
Refer patient to SUD treatment	1 (4.17)	29 (78.38)	51 (52.04)	11 (26.83)	47 (69.12)
Prescribe SUD treatment myself	18 (75.00)	1 (2.70)	18 (18.37)	11 (26.83)	9 (13.24)
Both	5 (20.83)	7 (18.92)	29 (29.59)	19 (46.34)	12 (17.65)
Missing	1	0	0	0	2
Are you familiar with the FindHelpNowKY.org Web site that lists SUD treatment centers in Kentucky with available openings?, n (column %)					
Yes	14 (56.00)	10 (27.03)	30 (30.93)	15 (36.59)	11 (15.71)
No	11 (44.00)	27 (72.97)	67 (69.07)	26 (63.41)	59 (84.29)
Missing	0	0	1	0	0
Do you follow up with your patients who are treated by you or who are referred to SUD treatment regarding SUD recovery support resources?, n (column %)					

(Continued on next page)

TABLE 1. (Continued)

	Addiction specialists (n = 25)	Emergency medicine physicians (n = 37)	Family and internal medicine physicians (n = 98)	Psychiatrists (n = 41)	Other specialties (n = 57)
Yes	21 (84.00)	2 (5.41)	52 (54.74)	27 (65.85)	19 (27.54)
No	4 (16.00)	35 (94.59)	43 (45.26)	14 (34.15)	50 (72.46)
Missing	0	0	3	0	1
Are you familiar with the FindRecoveryHousingNowKY.org Web site that lists certified recovery houses with available beds for patients in SUD recovery?, n (column %)					
Yes	10 (40.00)	4 (10.81)	16 (16.67)	11 (73.17)	6 (8.57)
No	15 (60.00)	33 (89.19)	80 (83.33)	30 (26.83)	64 (91.43)
Missing	0	0	2	0	0

SUD, substance use disorder.

having an in-state address. This survey was initially sent on November 27, 2023, to all in-state physicians, with a follow-up email on December 15, 2023. It was closed for responses on January 4, 2024. Anyone who responded was included in the study. The first question asked whether the physician treated patients with SUDs, and the survey was ended if they did not treat patients with SUDs. Of the 524 people who responded, 253 did not treat patients with SUDs. This left 271 (52%) responses for the final analysis.

Statistical Analysis

All of the self-identified addiction specialists were placed into the addiction specialist category, which included addiction medicine, addiction psychiatry, and internal medicine addiction specialists. Family medicine and internal medicine (FM/IM) physicians were grouped together, and emergency medicine physicians and psychiatrists made up their own groups. All of the other specialties—including but not limited to obstetrics/gynecology, physical medicine and rehabilitation, oncology, cardiology, nephrology, pediatrics, surgery, and maternal-fetal medicine—were placed into the

“other” category due to the low number of responses within those specialties.

Descriptive statistics were utilized after grouping the responses. In addition, cross-tabulations were performed between different questions in the survey. These analyses were conducted using online statistical analysis software called SAS OnDemand for Academics (SAS Institute, Cary, NC).

RESULTS

The descriptive statistics for the demographics and for each survey question are shown in Table 1 by specialty category; the percentages indicate the proportion of physicians from that specialty who responded with that particular answer. Approximately 25% of physician respondents did not screen for SUDs. Although most patients do not present for an SUD (except for those seen by addiction specialists), those who do have an SUD are rarely being seen/treated by an addiction specialist (65% noted that only 0%–25% of their patients with SUDs are already being seen/treated by an addiction specialist). Few patients are open to treatment in the emergency setting as well as other settings, but addiction specialists, FM/

TABLE 2. Cross-tabulation of the responses by specialty for the questions that ask about the percentage of patients who have/present with SUDs and the percentage of patients who are willing to accept treatment, 2023

What percentage of your patients with SUDs are willing to accept treatment for SUD?, n (row %; column %)										
	Addiction specialists					Emergency medicine physicians				
	0–25	26–50	51–75	76–100	Total	0–25	26–50	51–75	76–100	Total
What percentage of your patients have/present with SUDs?, n (row %; column %)										
0–25	1 (20; 50)	0 (0; 0)	2 (40; 33)	2 (40; 14)	5 (100; 22)	17 (85; 59)	3 (15; 50)	0 (0; 0)	0 (0; 0)	20 (100; 54)
26–50	1 (33; 50)	1 (33; 50)	1 (3; 17)	0 (0; 0)	3 (100; 13)	10 (71; 34)	3 (21; 50)	1 (7; 100)	0 (0; 0)	14 (100; 38)
51–75	0 (0; 0)	0 (0; 0)	2 (100; 33)	0 (0; 0)	2 (100; 9)	2 (67; 7)	0 (0; 0)	0 (0; 0)	1 (33; 100)	3 (100; 8)
76–100	0 (0; 0)	0 (0; 0)	1 (8; 17)	12 (92; 86)	13 (100; 57)	0 (0; 0)	0 (0; 0)	0 (0; 0)	0 (0; 0)	0 (100; 0)
Total	2 (9; 100)	1 (4; 100)	6 (26; 100)	14 (61; 100)	23 (100; 100)	29 (78; 100)	6 (16; 100)	1 (3; 100)	1 (3; 100)	37 (100; 100)

Boldface numbers represent the total number of respondents from the associated self-identified specialty.
SUD, substance use disorder.

IM physicians, and psychiatrist respondents reported having more success in the acceptance of treatment by patients with an SUD. Half of respondents referred patients to SUD treatment without prescribing any SUD treatment themselves, but only about one-third of physicians knew about FindHelpNowKY.org or FindRecoveryHousingNowKY.org, locator tools for SUD treatment slot openings and for recovery house bed openings. Addiction specialists were the only group in which the percentage of respondents who were familiar with FindHelpNowKY.org was higher than those who were not familiar with it.

Table 2 shows cross-tabulations between the percentage of patients who have/present with SUDs to physician respondents versus those who are willing to accept SUD treatment from physician respondents. A high percentage of addiction respondents who had patients presenting with an SUD reported that their patients were willing to accept treatment for SUDs. When examining the patients of psychiatrist respondents, those who saw a high total percentage of patients who presented with SUDs also had more patients who were willing to accept treatment (17% had a practice with an SUD patient majority and also had had 51%–100% willing to accept treatment); not surprisingly, there appears to be less willingness to accept treatment when a psychiatrist does not see many patients who have/present with SUDs (54% saw few patients with SUDs and reported that 0%–50% of them were willing to accept treatment).

In Table 3, FM/IM physician respondents reported that two-thirds of their patients were screened for SUDs, and if screened for SUDs, approximately one-third were willing to accept treatment for SUDs (responses of 51%–100%). Of the patients seen by psychiatrists who were screened for SUDs, two-thirds were not willing to accept treatment (responses of 0%–50%); this also was true for emergency physicians (72% of emergency medicine physician respondents screened for SUDs, and almost all who were screened were not willing to accept treatment). Addiction specialists had high rates of treatment acceptance, which aligned with their SUD screening practices.

Certain differences are seen in Table 4 when comparing the percentage of patients who presented with SUDs with whether the physician generally refers, treats, or does both. FM/IM physician respondents who had patients present with SUDs treated their patients themselves, and if the patient did not present with an SUD, then slightly more than half would refer them to treatment. Most addiction specialist respondents would treat the patients themselves. Similar to FM/IM specialists, psychiatrist respondents who saw a lower percentage of patients with SUDs responded that they would refer their patients to treatment more often, and those psychiatrist respondents whose practice included more patients with SUDs also reported more often that they would treat the patients themselves (54.5% of psychiatrists with $\geq 50\%$ of their patients presenting/having SUDs also treat only, whereas 83% with $< 50\%$ place a referral).

DISCUSSION

The purpose of this study was to survey current physicians in Kentucky for the evaluation of their management of patients with SUDs with a focus on the identification of their referral methods for linkage to SUD treatment and recovery support services. These results identify clear differences between the specialty responses and clarify important information about the treatment of these patients in the outpatient setting.

Self-identified addiction specialist respondents saw a high percentage of patients with SUDs, but it appears that approximately half of the respondents practice addiction part-time because not all of their patients had SUDs. Other findings specific to addiction specialists were expected because they prescribed treatment more often than the other specialties. Their patients also were more willing to accept treatment, and they were the only specialty that had a higher percentage of physician respondents who knew about FindHelpNowKY.org as an important resource in Kentucky for linking patients to SUD treatment and recovery housing.

The ED physician responses were different from those of the other specialties. SUD screening did not appear to make a

TABLE 2. (Continued)

Family medicine/internal medicine physicians					Psychiatrists					Other				
0–25	26–50	51–75	76–100	Total	0–25	26–50	51–75	76–100	Total	0–25	26–50	51–75	76–100	Total
33 (45; 87)	24 (32; 86)	12 (16; 86)	5 (7; 45)	74 (100; 81)	9 (43; 65)	7 (33; 64)	5 (24; 71)	0 (0; 0)	21 (100; 51)	29 (58; 85)	10 (20; 71)	8 (16; 57)	3 (6; 50)	50 (100; 74)
5 (33; 13)	4 (27; 14)	2 (13; 14)	4 (27; 36)	15 (100; 16)	3 (33; 21)	3 (33; 27)	1 (11; 14)	2 (22; 22)	9 (100; 22)	5 (38; 15)	3 (23; 21)	5 (38; 35)	0 (0; 0)	13 (100; 19)
0 (0; 0)	0 (0; 0)	0 (0; 0)	0 (0; 0)	0 (0; 0)	2 (33.33; 14)	1 (17; 9)	1 (17; 14)	2 (33; 22)	6 (100; 15)	0 (0; 0)	1 (50; 7)	1 (50; 7)	0 (0; 0)	2 (100; 3)
0 (0; 0)	0 (0; 0)	0 (0; 0)	2 (100; 18)	2 (100; 2)	0 (0; 0)	0 (0; 0)	0 (0; 0)	5 (100; 56)	5 (100; 12)	0 (0; 0)	0 (0; 0)	0 (0; 0)	3 (100; 50)	3 (100; 4)
38 (42; 100)	28 (31; 100)	14 (15; 100)	11 (12; 100)	91 (100; 100)	14 (34; 100)	11 (27; 100)	7 (17; 100)	9 (22; 100)	41 (100; 100)	34 (50; 100)	14 (21; 100)	14 (21; 100)	6 (9; 100)	68 (100; 100)

TABLE 3. Cross-tabulation of the responses by specialty for the questions that ask about the percentage of respondents who are screening for SUDs and the percentage of patients who are willing to accept treatment, 2023

	What percentage of your patients with SUDs are willing to accept treatment for SUD?, n (row %; column %)									
	Addiction specialists					Emergency medicine physicians				
	0–25	26–50	51–75	76–100	Total	0–25	26–50	51–75	76–100	Total
Are your patients screened for SUDs?, n (row %; column %)										
No	0 (0; 0)	0 (0; 0)	1 (25; 17)	3 (75; 21)	4 (100; 17)	8 (89; 28)	0 (0; 0)	1 (11; 100)	0 (0; 0)	9 (100; 24)
Yes	2 (11; 100)	1 (5; 100)	5 (26; 83)	11 (58; 79)	19 (100; 83)	21 (75; 72)	6 (21; 100)	0 (0; 0)	1 (4; 100)	28 (100; 76)
Total	2 (9; 100)	1 (4; 100)	6 (26; 100)	14 (61; 100)	23 (100; 100)	29 (78; 100)	6 (16; 100)	1 (3; 100)	1 (3; 100)	37 (100; 100)

Boldface numbers represent the total number of respondents from the associated self-identified specialty.
SUD, substance use disorder.

TABLE 3. (Continued)

Family medicine/internal medicine physicians					Psychiatrists					Other				
0–25	26–50	51–75	76–100	Total	0–25	26–50	51–75	76–100	Total	0–25	26–50	51–75	76–100	Total
20 (61; 50)	7 (21; 24)	5 (15; 33)	1 (3; 9)	33 (100; 35)	1 (25; 7)	1 (25; 9)	0 (0; 0)	2 (50; 22)	4 (100; 10)	8 (44; 24)	2 (11; 14)	6 (33; 43)	2 (11; 33)	18 (100; 26)
20 (32; 50)	22 (35; 76)	10 (16; 67)	10 (16; 91)	62 (100; 65)	13 (35; 93)	10 (27; 91)	7 (18; 100)	7 (19; 78)	37 (100; 90)	26 (52; 76)	12 (24; 86)	8 (16; 57)	4 (8; 67)	50 (100; 73)
40 (42; 100)	29 (30; 100)	15 (16; 100)	11 (12; 100)	95 (100; 100)	14 (34; 100)	11 (27; 100)	7 (17; 100)	9 (22; 100)	41 (100; 100)	34 (50; 100)	14 (21; 100)	14 (21; 100)	6 (8; 9; 100)	68 (100; 100)

difference in whether patients were willing to accept treatment. Despite this, patients who were screened in the ED were more likely to be referred, although fewer were treated when compared with other specialties. This is not unexpected because patients are likely to present to the ED with an acute issue, and ED physicians are not their regular physicians, so they were referred if screened.

The data gathered from the psychiatrists of Kentucky varied from the other specialties. Although their response percentages were similar to those of addiction specialists regarding patients who were willing to accept treatment, there were differences based on whether the patients were screened for SUDs. Among the psychiatrist respondents, patients who were screened for SUDs were less willing to accept treatment for SUD than those who were not screened. This may be due to co-occurring disorders in which the substance use is attributed to their mental health condition, and screening for SUDs does not make a difference if the patient does not want his or her SUD addressed by the psychiatrist.

The percentage of patients who were willing to accept treatment for SUDs was highest among addiction specialist and psychiatrist respondents, and IM/FM physician respondents had the next highest percentage. This presents an opportunity to reduce barriers to link these patients to treatment and recovery housing. Approximately two-thirds of FM/IM physician respondents did not know about FindHelpNowKY.org, which allows filtering of the desired referral location by real-time availability, location, and other patient-specific factors (eg, insurance) rather than calling each location to ask. Also notable is that approximately one-third of all physician respondents were not screening for SUDs. Interestingly,

patients were less likely to be willing to accept treatment if screened by the psychiatrists surveyed, but they were much more likely to be willing to accept SUD treatment when screened by FM/IM physician respondents. This may be due to the generalized nature and regularity of visits to FM/IM physicians, whereas patients visit psychiatrists for specific mental health-related conditions. The idea that the treatment of SUDs will improve health overall in a general manner likely plays a role here, and many mental health-related conditions may be considered a reason for substance use as self-treatment. Regardless, this illustrates a need for consistent screening among the patients of FM/IM physicians because they may be an integral gatekeeper for the initiation of SUD treatment and recovery housing.

The limitations to this study include the cross-sectional design, which restricts the identification of time-based trends. There also was a relatively low response rate compared with the number of in-state physicians licensed in Kentucky, which may have contributed to a selection bias. Recall bias may play a role because this survey data depended on the responses of physicians. In addition, their attitudes could be confounding the data because they could have under- or overestimated some of their responses. The definition of screening in the survey also could be considered a limitation because this was not defined in the survey and could have been misinterpreted as urine drug screening versus using verbal screening tools. Another important note is that these data were limited to the state of Kentucky and should be interpreted cautiously when generalized to other states.

Future research is necessary to focus on barriers to the initiation of SUD treatment with a prescription from physicians.

TABLE 4. Cross-tabulation of the responses by specialty for the questions that ask about the percentage of patients who have/present with SUDs and whether the respondent refers their patients, prescribes treatment, or does both, 2023

Do you generally refer your patients to SUD treatment or do you prescribe SUD treatment medications yourself (eg, medications for opioid use disorder)?, n (row %; column %)								
Addiction specialists					Emergency medicine physicians			
Refer patient to SUD treatment	Prescribe SUD treatment myself	Both	Total		Refer patient to SUD treatment	Prescribe SUD treatment myself	Both	Total
What percentage of your patients have/present with SUDs?, n (row %; column %)								
0–25	1 (20; 100)	4 (80; 24)	0 (0; 0)	5 (100; 22)	19 (95; 66)	0 (0; 0)	1 (5; 14)	20 (100; 54)
26–50	0 (0; 0)	0 (0; 0)	2 (100; 40)	2 (100; 9)	8 (57; 28)	1 (7; 100)	5 (36; 71)	14 (100; 38)
51–75	0 (0; 0)	1 (50; 6)	2 (14; 40)	2 (100; 9)	2 (67; 7)	0 (0; 0)	1 (33; 14)	3 (100; 8)
76–100	0 (0; 0)	12 (86; 71)	2 (14; 40)	14 (100; 61)	0 (0; 0)	0 (0; 0)	0 (0; 0)	0 (100; 0)
Total	1 (4; 100)	17 (74; 100)	5 (22; 100)	23 (100; 100)	29 (78; 100)	1 (3; 100)	7 (19; 100)	37 (100; 100)

Boldface numbers represent the total number of respondents from the associated self-identified specialty.
SUD, substance use disorder.

TABLE 4. (Continued)

Family medicine/internal medicine physicians				Psychiatrists				Other			
Refer patient to SUD treatment	Prescribe SUD treatment myself	Both	Total	Refer patient to SUD treatment	Prescribe SUD treatment myself	Both	Total	Refer patient to SUD treatment	Prescribe SUD treatment myself	Both	Total
40 (54; 82)	11 (15; 65)	23 (31; 85)	74 (100; 80)	7 (33; 64)	4 (19; 36)	10 (48; 53)	21 (100; 51)	35 (73; 76)	4 (8; 44)	9 (19; 75)	48 (100; 72)
9 (56; 18)	3 (19; 18)	4 (25; 15)	16 (100; 17)	3 (33; 27)	1 (11; 9)	5 (56; 26)	9 (100; 22)	10 (71; 22)	2 (14; 22)	2 (14; 17)	14 (100; 21)
0 (0; 0)	1 (100; 6)	0 (0; 0)	1 (100; 1)	1 (17; 9)	2 (33; 18)	3 (50; 16)	6 (100; 15)	0 (0; 0)	1 (50; 11)	1 (50; 8)	2 (100; 3)
0 (0; 0)	2 (100; 12)	0 (0; 0)	2 (100; 2)	0 (0; 0)	4 (80; 36)	1 (20; 5)	5 (100; 12)	1 (33; 2)	2 (67; 22)	0 (0; 0)	3 (100; 5)
49 (53; 100)	17 (18; 100)	27 (29; 100)	93 (100; 100)	11 (27; 100)	11 (27; 100)	19 (46; 100)	41 (100; 100)	46 (69; 100)	9 (13; 100)	12 (18; 100)	67 (100; 100)

Many physician respondents referred patients to treatment but did not initiate treatment. Patients who are started on medications for opioid use disorder in the hospital were more likely to present to outpatient treatment within 90 days.¹⁷ This initiation of treatment expands to patients with alcohol use disorder in the hospital and improves their linkage to follow-up care.¹⁸ This finding is consistent across the literature. More research is necessary to explore physician barriers to initiating SUD treatment, especially after the elimination of the X-waiver in December 2022.

CONCLUSIONS

FM/IM physicians present a unique opportunity to increase screening for SUDs in patients and for linking those with SUDs to treatment and recovery housing. Increasing the ability of these physicians to connect patients with SUDs quickly and efficiently to treatment and recovery support ser-

vices will allow for improved quality of care for people with SUDs in the Commonwealth of Kentucky.

ACKNOWLEDGMENT

The authors thank the Kentucky Board of Medical Licensure for their assistance in the distribution of the survey.

REFERENCES

1. Clay SW, Allen J, Parran T. A review of addiction. *Postgrad Med* 2008;120:E01–E07.
2. Rose ME. Are prescription opioids driving the opioid crisis? Assumptions vs facts. *Pain Med* 2018;19:793–807.
3. Kacha-Ochana A, Jones CM, Green JL, et al. Characteristics of adults aged ≥18 years evaluated for substance use and treatment planning - United States, 2019. *MMWR Morb Mortal Wkly Rep* 2022;71:749–756.
4. Buresh M, Stern R, Rastegar D. Treatment of opioid use disorder in primary care. *BMJ* 2021; 373:n784.
5. Chukmaitov A, Dahman B, Garland SL, et al. Addressing social risk factors in the inpatient setting: initial findings from a screening and referral pilot at an urban safety-net academic medical center in Virginia, USA. *Prev Med Rep* 2022;29:101935.

6. Langabeer JR, Champagne-Langabeer T, Yatsco AJ, et al. Feasibility and outcomes from an integrated bridge treatment program for opioid use disorder. *J Am Coll Emerg Physicians Open* 2021;2:e12417.
7. Hern HG, Lara V, Goldstein D, et al. Prehospital buprenorphine treatment for opioid use disorder by paramedics: first year results of the EMS buprenorphine use pilot. *Prehosp Emerg Care* 2023;27:334–342.
8. Firesheets K, Juarez S, Kopak A, et al. Naloxone plus, plus some: examining Ohio's quick response teams through the lens of deflection. *J Public Health Manag Pract* 2022;28(Suppl 6):S330–S338.
9. Tran TH, Swoboda H, Peticone K, et al. The substance use intervention team: a hospital-based intervention and outpatient clinic to improve care for patients with substance use disorders. *Am J Health Syst Pharm* 2021;78:345–353.
10. Byrne KA, Roth PJ, Merchant K, et al. Inpatient link to peer recovery coaching: results from a pilot randomized control trial. *Drug Alcohol Depend* 2020;215:108234.
11. Englander H, Dobbertin K, Lind BK, et al. Inpatient addiction medicine consultation and post-hospital substance use disorder treatment engagement: a propensity-matched analysis. *J Gen Intern Med* 2019;34:2796–2803.
12. Ari M, Murray J, Dickson S, et al. A model to improve care and enhance the physician–patient relationship for hospitalized patients with opioid use disorder. *Acad Med* 2023;98(6S):S25–S27.
13. Scott CK, Dennis ML, Grella CE, et al. Using recovery management checkups for primary care to improve linkage to alcohol and other drug use treatment: a randomized controlled trial three month findings. *Addiction* 2023;118:520–532.
14. Krupp J, Hung F, LaChapelle T, et al. Impact of policy change on access to medication for opioid use disorder in primary care. *South Med J* 2023;116:333–340.
15. O'Malley DM, Abraham CM, Lee HS, et al. Substance use disorder approaches in US primary care clinics with national reputations as workforce innovators. *Fam Pract* 2022;39:282–291.
16. Bunn TL, Quesinberry D, Jennings, T, et al. Timely linkage of individuals to substance use disorder treatment: development, implementation, and evaluation of FindHelpNowKY.org. *BMC Public Health* 2019;19:177.
17. Tierney HR, Rowe CL, Coffa DA, et al. Inpatient opioid use disorder treatment by generalists is associated with linkage to opioid treatment programs after discharge. *J Addict Med* 2022;16:169–176.
18. Ober AJ, Osilla KC, Klein DJ, et al. Pilot randomized controlled trial of a hospital-based substance use treatment and recovery team (START) to improve initiation of medication for alcohol or opioid use disorder and linkage to follow-up care. *J Subst Use Addict Treat* 2023;150:209063.