

BACKGROUND

- Evolving opioid and polydrug use epidemic has led to an exponential rise in drug-related complications and acute hospitalizations for individuals with substance use disorders [1].
- Hospitals emphasize addiction specialist consult services [2], access to medication for opioid use disorder (MOUD), and naloxone for overdose prevention, yet ignore other evidence-based life saving harm reduction strategies.

STUDY OBJECTIVES

1. Examine knowledge, attitudes, and self-reported practices of various harm reduction strategies among multidisciplinary in-hospital providers in Pittsburgh, Pennsylvania.
2. Identify potential barriers and facilitators of in-hospital expansion of harm reduction strategies.

METHODS

- Anonymous electronic Qualtrics survey: 26-multiple choice to assess provider demographics and 5-point Likert scale questions to assess provider attitudes and experience with the following harm reduction strategies
 1. Overdose prevention: Initiating MOUD, prescribing naloxone, counseling on overdose prevention, counseling on alternate routes of opioid use, distributing fentanyl test strips (FTS)
 2. Infection prevention: screening for blood borne viral infections (BBV), counseling on skin cleaning, distributing safer use supplies
- Primary outcomes:
 - **Self-Perceived Importance for patients to receive during their hospital stay** : defined as reporting only “very important” on a 5-point Likert scale
 - **Frequency of offering harm reduction strategies in their own practice**
 - **Provider comfort of offering harm reduction strategies in their own practice**: defined as composite of “very comfortable” and “somewhat comfortable” via a 5-point Likert scale
- Survey link was sent to clinical leaders in multiple departments to distribute to their inpatient providers at our institution
- Data was collected from December 2022-January 2023 and participants received \$15 compensation for survey completion.
- We conducted descriptive analysis with frequencies and proportions reported for categorical variables (Table 1). We conducted differences across provider specialty with chi square tests (Table 2)

RESULTS

Table 1: Characteristics of Inpatient Provider Respondents (n=106)

Characteristics	%
Clinician type	
Physician	69.8
Advanced practicing provider	5.7
Registered nurse	1
Pharmacist	20.8
Social worker	2.8
Specialty	
GIM/Hospitalist	34.9
ID	17.4
Emergency Medicine	20.8
Addiction Medicine	7.3
Surgery	4.6
Other	16.5
Gender	
Female	66
Male	33
Other	1
Race	
White	82.1
Black	0
Asian	12.3
Prefer not to answer	3.7
Other	1.9
Ethnicity	
Hispanic	5.7
Not Hispanic	90.6
Prefer not to answer	3.8
Years in practice	
0-5	38.7
6-10	24.5
11-15	18.9
16+	17.9
Number of patients in the hospital did you provide direct care or services for who use(d) illicit substances in past month	
0-10	63.3
>11	35.8
Has referred to community-based harm reduction resources	54.7
Has never received any training on how to deliver these harm reduction strategies	66

Figure 1: Prevalence of Perceived Importance and Self-Reported Frequency of Offering Overdose Prevention Strategies (n=106)

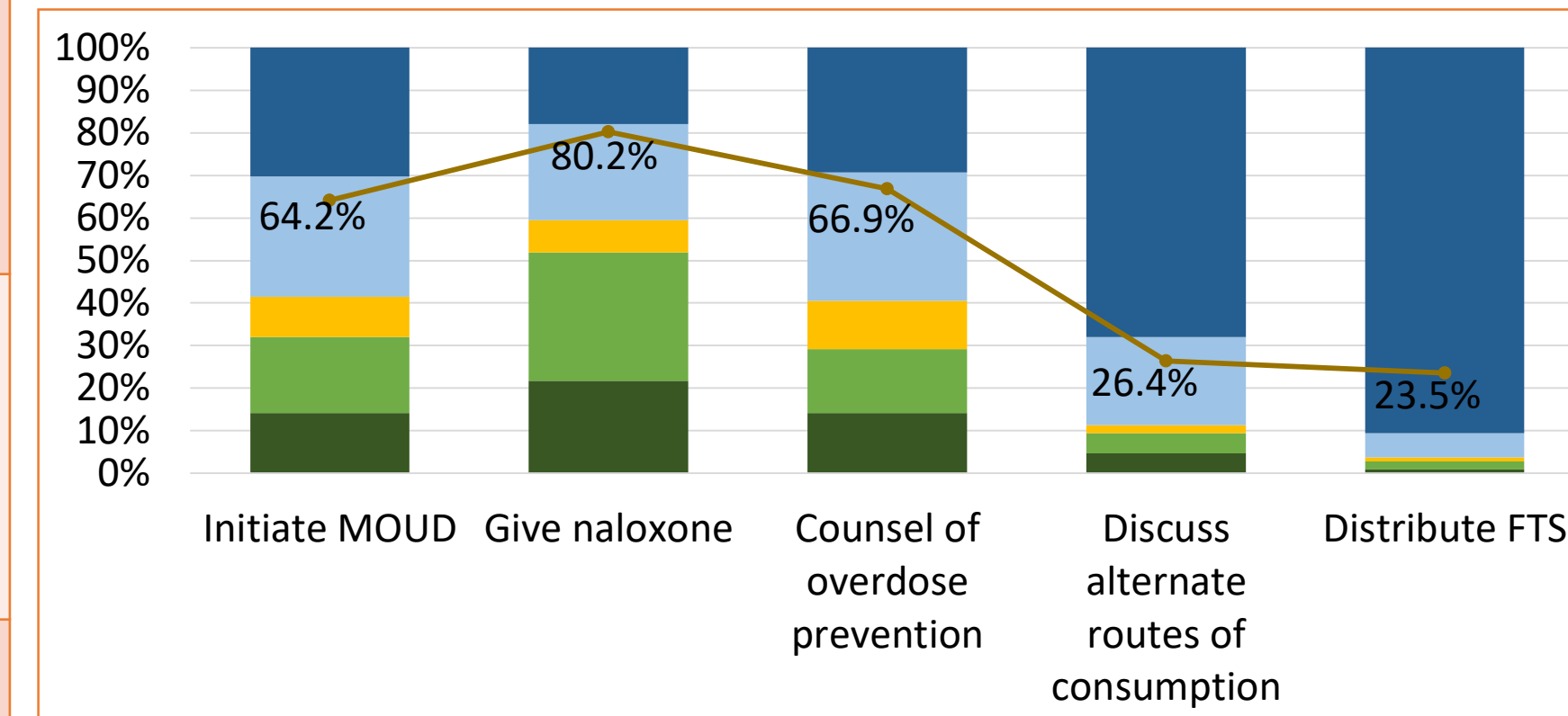


Figure 2: Prevalence of Perceived Importance and Self-Reported Frequency of Offering Infection Prevention Strategies (n=106)

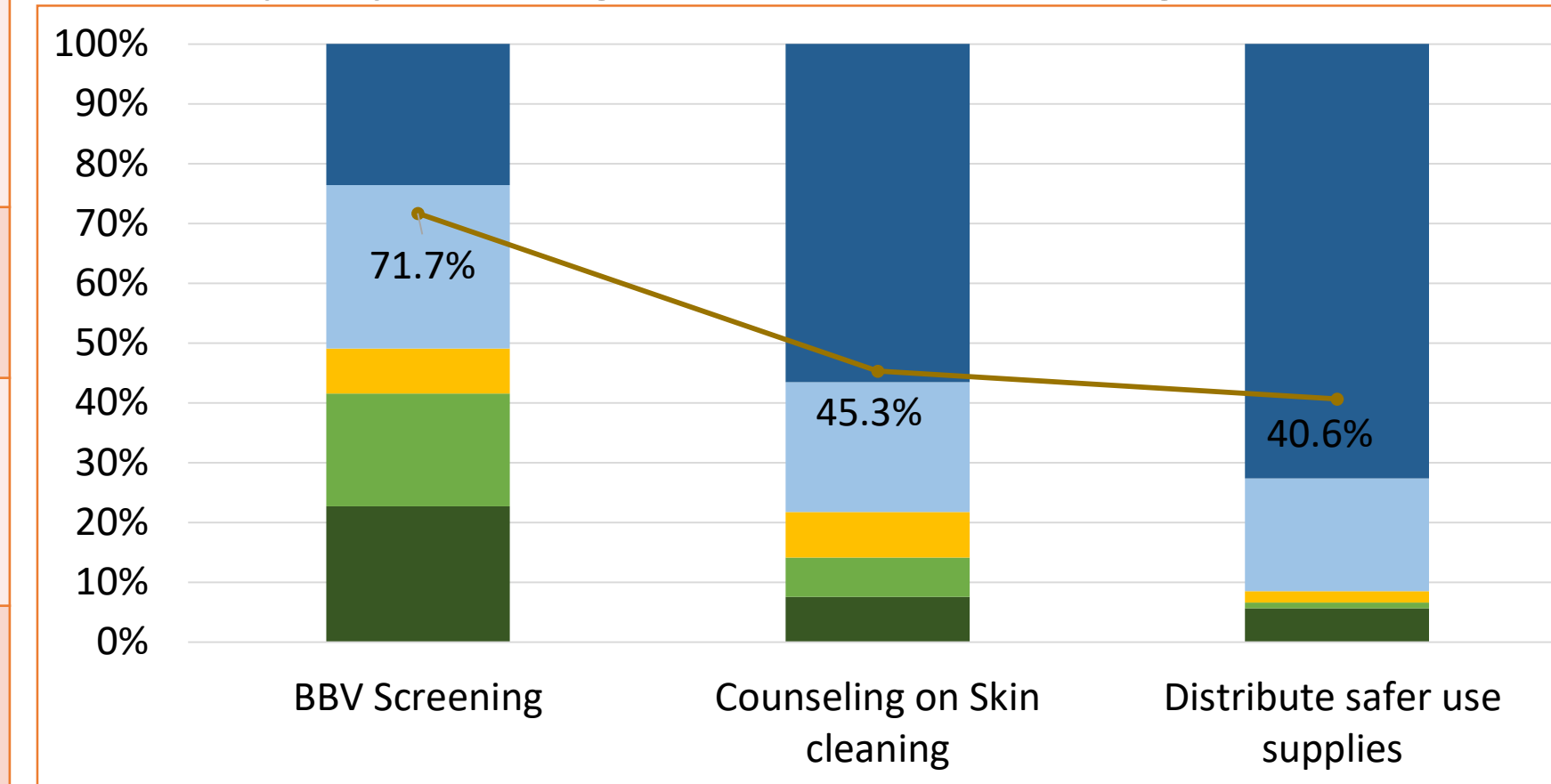


Table 2: Inpatient Provider Comfort with Harm Reduction Strategies (n=106)

Harm Reduction Strategies	Total (N=106)	General Internal Medicine (N=38)	Infectious Disease (N=19)	Emergency Medicine (N=20)	Addiction Medicine (N=6)	Other* (N=23)	P value	
	%							
Overdose prevention	MOUD	49.1	44.7	31.6	60	100	47.8	0.04
	Naloxone	87.7	92.1	68.4	100	100	82.6	0.02
	Overdose prevention counseling	57.5	55.3	47.4	65	100	52.2	0.20
	Discussing alternate routes	29.2	18.4	31.6	30	100	26.1	<0.01
	Distributing FTS	24.5	15.8	21.1	15	66.7	39.1	0.03
Infection Prevention	BBV screening	79.2	84.2	78.9	75	83.3	73.9	0.87
	Counseling on Skin cleaning	53.8	26.3	57.9	85	83.3	60.9	<0.01
	Distributing Sterile supplies	37.7	15.8	42.1	65	66.7	39.1	<0.01

*Other: includes provider specialties in surgery, critical care, pediatrics, palliative care, family medicine, cardiology, etc

DISCUSSION

- Inpatient providers provide direct care to hospitalized individuals who use illicit substances and recognize the importance of harm reduction strategies, yet most never receive any trainings on harm reduction strategies
- Inpatient provider comfort varies depending on the type of harm reduction strategy and across specialties most feel comfortable offering BBV screenings and naloxone during an acute hospitalization.
- Non-addiction medicine specialty inpatient providers are less comfortable with the full spectrum of harm reduction strategies which are opportunities for future provider education and intervention.
- There appears to be a mismatch between inpatient providers comfort and perceived importance and the frequency with which they current offer harm reduction strategies in their practice. This ought to be an area for future research to understand the barriers to practice implementation

CONCLUSIONS

Given the rising rates in hospitalizations among patients with substance use disorders, our findings suggests that universal and standardized provider trainings on harm reduction and clear identification of inpatient provider roles in offering harm reduction strategies may be beneficial to the successful future implementation of in-hospital harm reduction interventions.

REFERENCES

1. Ronan MV, Herzig SJ. Hospitalizations Related To Opioid Abuse/Dependence And Associated Serious Infections Increased Sharply, 2002-12. Health Aff (Millwood). 2016 May 1;35(5):832-7. doi: 10.1377/hlthaff.2015.1424.
2. McNeely J, Troxel AB, Kunins HV, Shelley D, Lee JD, Walley A, Weinstein ZM, Billings J, Davis NJ, Marcello RK, Schackman BR, Barron C, Bergmann L. Study protocol for a pragmatic trial of the Consult for Addiction Treatment and Care in Hospitals (CATCH) model for engaging patients in opioid use disorder treatment. Addict Sci Clin Pract. 2019 Feb 19;14(1):5. doi: 10.1186/s13722-019-0135-7.

■ Always

■ Most of the time

■ About half the time

■ Sometime

■ Never

— Perceived as very important*