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A Comprehensive Needs Assessment of Rural Syringe Services

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Background

Drug Overdose Epidemic and Rise in Infectious Diseases

There is a current drug overdose epidemic with a significant increase in use of fentanyl, which was involved in 75% of all opioid-related fatalities in Vermont in 2018.¹ This rise in intravenous opioid use corresponds with increases in transmission of infectious diseases, including HIV and HCV.²

Syringe Services Programs (SSPs)

For people who inject drugs (PWID), using sterile syringes can reduce the risk of transmitting infections.³ SSPs are harm reduction programs that provide services such as access to sterile syringes, injection equipment, naloxone training, employment services, and hygiene kits to PWID.⁴ PWID who use SSPs report reduced drug use and increased drug treatment enrollment.⁵

SSPs in Vermont

There are substantially fewer SSPs in rural areas.⁶ Vermont CARES is a non-profit in rural Vermont that provides syringe exchange and case management services to clients with HIV and PWID. Vermont CARES is working to expand services for PWID and to reduce harms associated with drug use and sexual activity.

Objectives

1. Assess which case management services are most valuable to clients using needle exchange services in rural Vermont.
2. Explore the most useful form of assistance for requested services.
3. Evaluate differences in needs between clients with varying overdose risk status.

Methodology

Participants:

- Vermont CARES syringe exchange clients from Rutland (n=39), Barre (n=3), and mobile van (n=2) sites

Survey:

Participants completed a four-minute paper survey with assistance from staff at Vermont CARES to assess the following:

- 1) Most useful method of delivery for services already provided by Vermont CARES.
- 2) Assessment of services not currently provided, and the form of assistance participants would prefer for each service.
- 3) Overdose risk assessment including current homelessness, overdose, and incarceration history in the past year.

Statistics:

- Fisher's exact test was performed using Graph Pad

Results

Services	Help me contact a provider	Make appointments with me	Text me reminders for appointments	Give me a ride to appointments	Find transportation to appointments	Attend appointments with me	Help me with paperwork	Assist me with following up with this service
Medical (n=34-37)	35.3	37.1	41.7	37.8	34.3	14.3	26.5	38.2
Dental (n=28-37)	37.8	34.5	42.9	33.3	34.5	17.9	21.4	34.5
Social Services (n=28-34)	35.3	35.7	34.5	31.0	27.6	20.7	24.1	30.0
Health Insurance (n=27-36)	27.8	18.5	25.9	21.4	17.9	14.8	17.2	20.7
Housing Authorities (28-35)	40.0	37.9	41.4	25.0	27.6	24.1	32.1	34.5
Legal Help (30-35)	28.6	24.1	30.0	17.2	19.4	16.7	22.6	25.8
Substance Use Treatment (31-35)	34.3	32.3	38.7	29.0	32.3	25.8	25.8	31.3

Figure 1. Heat map showing percent of respondents who indicated "yes" for what method of service delivery would be helpful for them for each type of service. Darker color corresponds to higher affirmative response.

Age, n (%)	
18-25	2 (4.5)
26-35	18 (40.9)
36-45	16 (36.4)
46-55	5 (11.4)
56-65	3 (6.8)
Gender, n (%)	
Female	27 (61.4)
Male	17 (38.6)
Race, n (%)	
Non-Hispanic White	42 (95.5)
Hispanic White	1 (2.3)
Native American	1 (2.3)
>= 1 Risk factor, n (%)	15 (37.5)

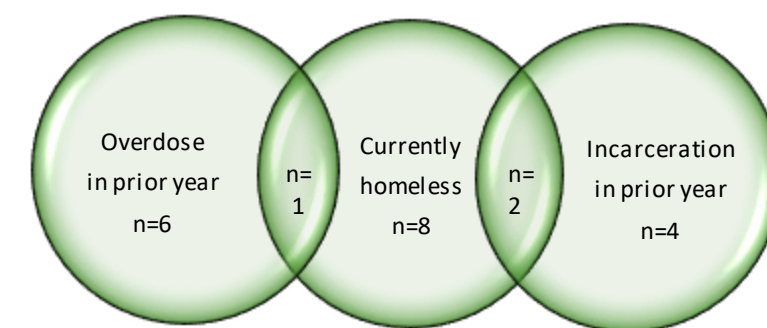


Figure 2. Venn diagram showing stratification of risk factors.

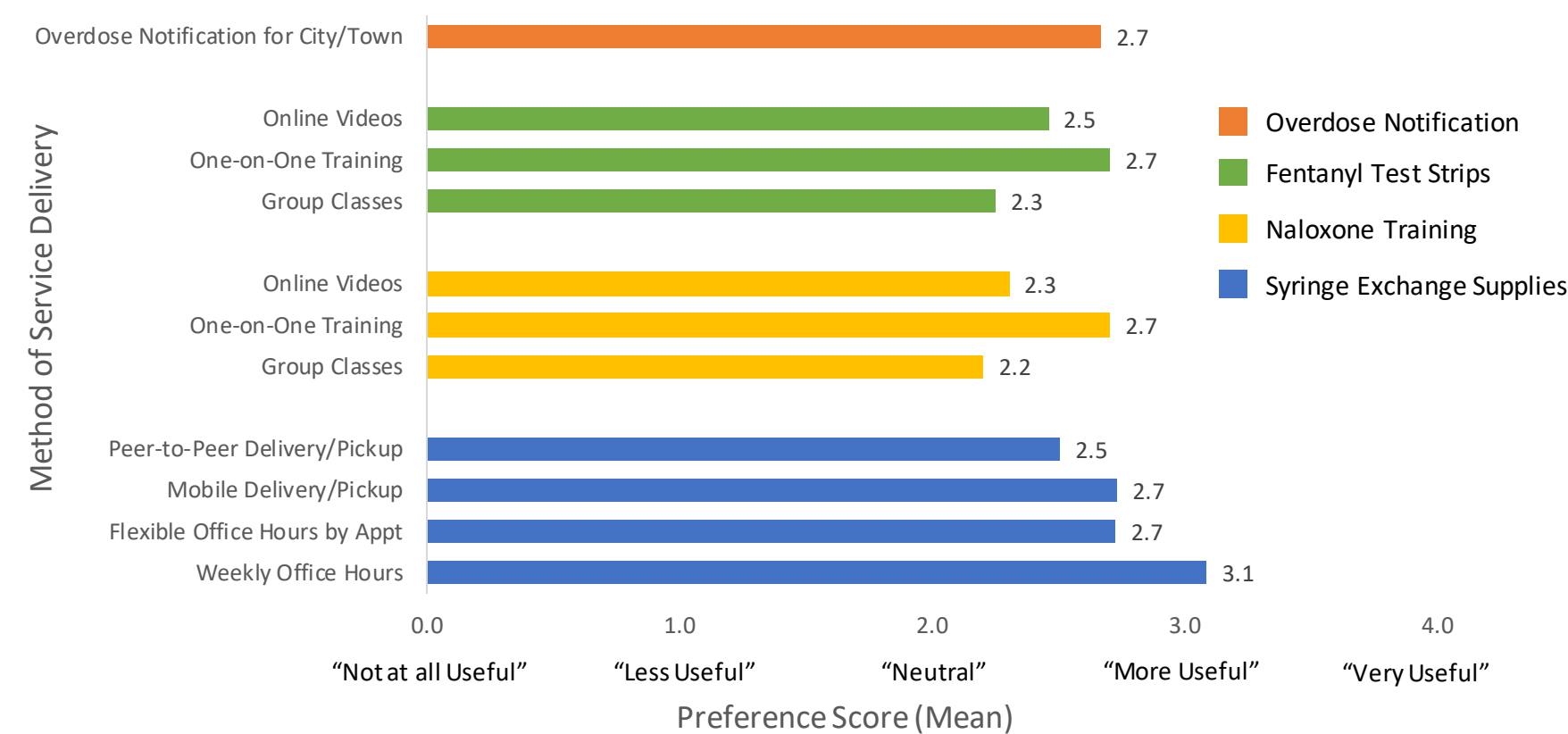


Figure 3. Mean preference score for service delivery methods offered by Vermont CARES for overdose notification (n=43), syringe exchange supplies (n=41-43), naloxone training (n=42-43), and fentanyl test strip training (n=41-43).

Services	People with risk factors								Legend
	Help me contact a provider	Make appointments with me	Text me reminders for appointments	Give me a ride to appointments	Find transportation to appointments	Attend appointments with me	Help me with paperwork	Assist me with following up with this service	
Medical (n=10-12)									<ul style="list-style-type: none"> 0-25th %ile 26-50th %ile 51-75th %ile 76-100th %ile
Dental (n=9-12)									
Social Services (n=9-11)									
Health Insurance (n=9-11)				★					
Housing Authorities (n=9-11)						★			
Legal Help (n=9-11)									
Substance Use Treatment (n=9-12)									
Services	People without risk factors								Legend
	Medical (n= 24-27)								
	Dental (n= 19-25)								
	Social Services (n= 2-6)								
	Health Insurance (n= 19-26)				★				
	Housing Authorities (n= 19-25)						★		
Legal Help (n= 20-24)									
Substance Use Treatment (21-23)									

Figure 4. Heat maps showing percent of respondents with and without risk factors who indicated "yes" for service delivery method that would be helpful for them. Darker color corresponds to higher affirmative response.

Discussion

Texting program

- Implementing a text reminder program for SSP users is an intervention that is in high demand, particularly by people with at least one risk factor
- Texting SSP participants overdose notifications for their geographic area was in demand by many

Screening

- Screening SSP users for risk factors such as homelessness may help identify and direct those in need of more resources
- For instance, people with risk factors were significantly more likely to request rides to insurance appointments and accompaniment to housing appointments

Improving Current Infrastructure

- SSPs could offer one on one training for use of naloxone and fentanyl test strips rather than group or online modalities to best meet the needs
- Weekly office hours for SSPs seem to be a useful delivery method that Vermont CARES currently offers

Limitations/ Future Directions

Limitations

- The survey reflected mainly non-Hispanic white populations, concordant with the demographics of the region
- The majority of responses were from participants attending the site in Rutland, VT. Conclusions are mainly applicable to that one site

Future Directions for research

- Expand outreach efforts to capture the needs of participants attending all Vermont CARES sites
- Dedicate resources on how to best provide participants with one-on-one training towards harm reduction

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