



First Responder Experiences with a Novel Naloxone Leave-Behind Program

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INTRODUCTION

Background

- Naloxone is a key harm reduction tool to prevent opioid overdose-related death
- Naloxone Leave-Behind (NLB) programs are a new strategy for pre-hospital first responders (FRs) to distribute naloxone & provide training at scene of opioid overdose
- No literature describes FRs' direct experiences with NLB programs

Specific Aims

- Identify & describe facilitating factors & barriers to naloxone distribution among FRs'
- Assess FR interest in education on addiction & harm reduction

METHODS

- Anonymous online survey distributed to FRs at 7 EMS agencies with NLB protocols
- Survey developed using Consolidated Framework for Implementation Research
- Responses independently reviewed by four reviewers; a fifth reviewer reconciled discrepancies
- **Data analysis:** inductive coding used for qualitative data; summary statistics used for quantitative data

RESULTS

Survey Distribution

- Survey emailed to 708 FRs
- 56 participants
 - 37 (73%) correctly described purpose of NLB program
 - 42 (79%) endorsed receiving related training
 - 12 (23%) had distributed an NLB kit

Table 1. Participant characteristics.

Characteristic	Number (%)
Self-identified gender	
Male	39 (70%)
Female	17 (30%)
Age (years), median (range; IQR)	36 (20-67; 28-48)
Time in practice as FR (years), median (range; IQR)	10 (1-37; 5-24)
Training	
Advanced Life Support	43 (77%)
Basic Life Support	11 (20%)
Medical First Responder	2 (3%)

Table 2. Facilitators & barriers to distributing NLB kits & providing naloxone training.

	Topic	Representative quotes	
Facilitator	Kit easily available	"Kits are prepackaged...instructions in pamphlet form."	
	Patient or family requested kit	"Kits are readily available and most people want one left with them."	
	Someone was available to leave kit with	"The scene was calm and safe and the friend was well-versed on how to use Narcan."	
Barrier	Provider-related	Forgetting to leave kit	"Out of sight out of mind ordeal."
		Not knowing kits were available	"Did not know it was an option."
	Patient-related	Not having someone to leave kit with	"No one was home...to leave naloxone behind."
		Refusing kit	"The main roadblock is just getting people to accept it. There's a surprising amount of resistance from patients themselves but also from their family members and partners at times."
	Concern for legal consequences	"Accepting Narcan in front of people in uniform is a tacit admission of wrongdoing and will result in legal consequences."	
	Medical acuity	"The patient was in critical condition, there was not enough time to provide a leave behind kit to family and explain how to use it."	

Table 3. Participant interest in related education.

	Agree		Neither agree nor disagree		Disagree	
	n	%	n	%	n	%
I would be interested in a continuing education course to learn more about harm reduction for substance use.	23	48%	14	29%	11	23%
I would be interested in a continuing education course to learn more about addiction.	22	46%	13	27%	13	27%

CONCLUSION

- Participants demonstrated strong understanding of NLB program; few had distributed a kit
- Many modifiable barriers cited
- Moderate interest in related education
- **Limitations:** response bias, low response rate

REFERENCES

1. LeSaint, K., Montoy, J. C., Silverman, E., Raven, M., Schow, S., Coffin, P., Brown, J., & Mercer, M. (2022). Implementation of a leave-behind Naloxone program in San Francisco: A one-Year experience. *Western Journal of Emergency Medicine*, 23(6). <https://doi.org/10.5811/westjem.2022.8.56561>
2. Scharf, B. M., Sabat, D. J., Brothers, J. M., Margolis, A. M., & Levy, M. J. (2020). Best practices for a novel Ems-based Naloxone Leave behind program. *Prehospital Emergency Care*, 25(3), 418–426. <https://doi.org/10.1080/10903127.2020.1771490>
3. Montoy, J. C., Mercer, M. P., Silverman, E. C., Raven, M. C., & LeSaint, K. T. (2022). Emergency medicine services providers' attitudes toward naloxone distribution and training programs. *The American Journal of Emergency Medicine*, 51, 76–78. <https://doi.org/10.1016/j.ajem.2021.10.015>
4. Tobin, K. E. (2005). Attitudes of emergency medical service providers towards naloxone distribution programs. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 82(2), 296–302. <https://doi.org/10.1093/jurban/jti052>

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