Policy Evaluation of Michigan's Statewide Naloxone Standing Order

Pharmacist Survey Method and Key Findings

Table of Contents

Background and Purpose

The Michigan Department of Health and Human Services (MDHHS) received a grant from the Center for Disease Control (CDC) to better understand and address the opioid crisis in Michigan. As part of the grant, the Calvin University Center for Social Research (CSR) conducted an evaluation of Michigan's statewide naloxone standing order, focusing on its implementation and impact in Kent County, Michigan. The naloxone standing order allows people to get naloxone at participating pharmacies without an individual prescription. Naloxone, better known by the brand name Narcan, is a drug that can prevent death in the case of an opioid overdose.

CSR identified eight indicators of success for the naloxone standing order through interviews with 11 key informants and focus groups with 29 stakeholders. These indicators are listed in in **Table 1**. Next, CSR searched for existing data sources that could be used to measure each of the indicators of success. Only indicators 1a, 4, and 7 could be measured through existing data sources. Then, CSR designed new evaluation tools to measure the remaining indicators of success for which there were no existing data sources. These evaluation tools were implemented between fall 2020 and summer 2021.

As listed in **Table 1**, the pharmacist survey was designed to measure indicators of success 1b, 1c, 2a, and 2b.

Table 1 Indicators of success of the naloxone standing order and their data sources

#	Indicator of success	Data source(s)
1a	Pharmacy involvement: Enrollment in SO	Naloxone Standing Order Report (MDHHS)
1b	Pharmacy involvement: Pharmacist training	Pharmacist survey
1c	Pharmacy involvement: Pharmacists recommending naloxone	Pharmacist survey
2a	Pharmacist awareness of the SO, OD symptoms, & naloxone administration	Pharmacist survey Pharmacy secret caller study
2b	Pharmacist stigma about opioid use and having naloxone	Pharmacist survey Pharmacy secret caller study Community survey
3a	Public awareness of naloxone, the SO, OD symptoms, & naloxone administration	Community survey
3b	Public stigma about opioid use and having naloxone	Community survey
4	Naloxone prescriptions filled through SO	Naloxone Standing Order Report (MDHHS)
5	Rate of people who keep naloxone on hand	Community survey
6	Successful reversal	None
7	Opioid overdose death rate	Michigan Resident Death File (MDHHS)
8	Comprehensive and standardized data collection and reporting	% of indicators 1-7 with a data source

Method

Survey Design

CSR partnered with pharmacists Dr. Victoria Tutag Lehr of Wayne State University and Dr. Claire Nolan of the Michigan Center for Clinical Systems Improvement to design the survey. Dr. Tutag Lehr and other researchers at the Wayne State University Center for Urban Studies fielded a survey of pharmacists about overdose prevention and naloxone in 2019. The current pharmacist survey used many of the same survey questions as the 2019 survey to allow comparisons over time; additional content was adapted from other existing surveys.[1]

---

[1] Wayne State University Center for Urban Studies (n.d.). 2021 Pharmacist Survey on Buprenorphine for Opioid Use Disorder (OUD).

The survey can be viewed online. The survey was reviewed and approved by the Calvin University Institutional Review Board (IRB).

Participant Recruitment

All pharmacists licensed in Michigan who work in community-based pharmacies were eligible to participate. We used several methods to recruit participants:

1. We acquired a list of licensed pharmacists and pharmacies from the Michigan Department of Licensing and Regulatory Affairs (LARA). Of 20,208 total records, 17,974 included an email address. Nine hundred thirty-seven of those records had identical email addresses listed on multiple records. This left 17,037 records with a unique email address with the potential to reach an individual pharmacist. We sent email invitations to those 17,037 email addresses. Four hundred sixty-two emails were recorded as bounced by the survey software, leaving 16,575 potential respondents. In all, 678 pharmacists completed the survey, yielding a 4.1% response rate. Of these, 427 reported that they worked in a community-based pharmacy and were included in the results.

2. The Kent County Pharmacists Association (KCPA) promoted the survey through emails and social media posts. Eleven pharmacists who reported working in a community-based pharmacy were recruited were recruited through the KCPA.

3. The Michigan Pharmacists Association (MPA) promoted the survey through its newsletters. Nine pharmacists who reported working in a community-based pharmacy were recruited through the MPA

In all, 700 pharmacists completed the survey from May to August 2021. Of those, 447 reported that they work in a community-based pharmacy. Survey results are based on those 447 pharmacists.

Wayne State University Center for Urban Studies (n.d.). Pharmacist Survey on Overdose Prevention and Naloxone.

Meyerson B.E., Agley J.D., Jayawardene W., Eldridge L.A., Arora P., Smith C., Vadiei N., Kennedy A., Moehling T., and the PharmNet Research Team. (2020). Feasibility and acceptability of a proposed pharmacy-based harm reduction intervention to reduce opioid overdose, HIV and hepatitis C. *Research in Social and Administrative Pharmacy*, 16(5), 699-709. doi: 10.1016/j.sapharm.2019.08.026

Data Visualizations

[Interactive data visualizations](#) of the study's results can be viewed on Tableau Public.

Key Findings

Pharmacist Training

The survey included one check-all-that-apply item assessing pharmacist training related to naloxone and the standing order (success indicator 1b). Specifically, respondents were asked "In the past 5 years, have you had any specific training on naloxone?" They indicated which of seven types of naloxone training that they had completed. As listed in **Table 2**, just over half of respondents indicated they had participated in workplace-based training about naloxone. Only 6.9% of respondents reported that they had not participated in any type of naloxone training in the past five years; 93.1% had participated in at least one type of naloxone training. Based on these results, **success indicator 1b has a score of 93.1.**

Table 2 Pharmacist survey items measuring pharmacist training

#	In the past 5 years, have you had any specific training on naloxone? *Check all that apply.*	# (out of 447)	%
1	Workplace-based training	266	59.5%
2	Accredited Continuing Education (CE)	245	54.8%
3	Personal research	124	27.7%
4	Webinar	95	21.3%
5	School-based training	58	13.0%
6	Community-based training	39	8.7%
7	Interprofessional conference	34	7.6%
8	Another type of training	3	0.3%
9	No training on naloxone in past 5 years	31	6.9%
	One or more types of training on naloxone in past 5 years	416	93.1%

Pharmacists Recommending Naloxone

The survey included two items assessing the frequency with which pharmacists recommend naloxone (success indicator 1c). These items are listed in **Table 3**, along with the percentage of respondents who indicated that they had recommended naloxone in the past, *just a few times*, *about once a week or more*, or *about once a month*. About two-thirds of responding pharmacists had recommended naloxone to a patient who was filling an opioid prescription, whereas about one-third had recommended naloxone to a patient who may be using illegal opioids. These items average to 50.0%. Based on these results, **success indicator 1c has a score of 50.0.**

Table 3 Pharmacist survey items measuring pharmacists recommending naloxone

#	Item	Excluding "no answer" responses	Including "no answer" responses
1	Have you recommended naloxone to a patient who is filling an opioid prescription?	71.3%	67.3%
2	Have you recommended naloxone to a patient who may be using illegal opioids?	34.8%	32.7%
	Average of items measuring pharmacists recommending naloxone	53.1%	50.0%

Pharmacist Awareness

The survey included five items assessing pharmacist awareness of the naloxone standing order (success indicator 2a). These items are listed in the top section of **Table 4**, along with the percentage of respondents who indicated awareness or answered the question accurately. Across items, an average of 73.1% of responding pharmacists were aware of aspects of the standing order.

The survey also included three items assessing pharmacist awareness of opioid overdose and naloxone administration. These items are listed in the bottom section of **Table 4**, along with the percentage of respondents who indicated they *strongly agree* or *agree* with each item. Across items, an average of 75.0% of responding pharmacists indicated awareness of opioid overdose and naloxone administration.

When averaging across all eight pharmacist awareness items, 73.8% of respondents reported awareness. Based on these results, **success indicator 2a has a score of 73.8** from the pharmacist survey; this indicator is also measured in the pharmacy secret caller study.

Table 4 Pharmacist survey items measuring pharmacist awareness

#	Item	Excluding "no answer" responses	Including "no answer" responses
	Items measuring awareness of standing order		
1	Prior to taking this survey, did you know that Michigan implemented a naloxone standing order (SO) to allow pharmacists to dispense naloxone to individuals without a patient-specific prescription?	93.7%	93.1%
2	True or false: Pharmacists are required to provide one-on-one naloxone administration training to people who receive naloxone through the SO. (Correct answer: True)	86.3%	78.0%
3	True or false: Naloxone dispensed through the SO must be accompanied by a list of substance use disorder services. (Correct answer: True)	50.1%	44.6%
4	True or false: Pharmacists dispensing naloxone under the SO are liable for damages from its use in an opioid overdose. (Correct answer: False)	90.9%	80.9%
5	True or false: Under the SO, individuals may request naloxone at participating pharmacies, but pharmacists may not recommend naloxone to patients. (Correct answer: False)	77.4%	68.5%
	Average of items measuring awareness of standing order	*79.7%*	*73.0%*
	Items measuring awareness of opioid overdose & naloxone administration		
1	I can identify factors that place individuals at risk for opioid overdose.	81.6%	79.4%
2	I can recognize physical signs of an opioid overdose.	78.9%	77.0%
3	I can confidently administer naloxone in an opioid overdose situation.	70.6%	68.7%
	Average of items measuring awareness of opioid overdose & naloxone administration	*77.0%*	*75.0%*
	Average of ALL items measuring pharmacist awareness	78.7%	73.8%

Pharmacist Stigma

The survey included four items assessing pharmacist stigma about opioid use and having naloxone (success indicator 2b). These items are listed in **Table 5**, along with the percentage of respondents who indicated that they *strongly disagree* or *disagree* with item 1 (an item indicating no stigma) and the

percentage of respondents who indicated that they *strongly agree* or *agree* with items 2-4. Across items, an average of 14.5% of pharmacists' responses indicated stigma toward people who use opioids or have naloxone. When converted to a 0-100 scale in which higher scores are better, **success indicator 2b has a score of 85.5** from the pharmacist survey; this indicator is also measured in the community survey and the pharmacy secret caller study.

Table 5 Pharmacist survey items measuring pharmacist stigma

#	Item	Excluding "no answer" responses	Including "no answer" responses
1	I support the provision of naloxone to individuals without a patient-specific prescription via the Michigan standing order.	4.8%	4.7%
2	The availability of naloxone enables illicit drug use.	12.8%	12.5%
3	I would rather not have to care for individuals with opioid use disorder in my pharmacy practice.	11.4%	11.2%
4	People who use illicit opioids take more from society than they give.	30.3%	29.5%
	Average of items measuring pharmacist stigma	**14.8%**	**14.5%**

Questions, Feedback, and Requests for Support

Please reach out if you have questions or would like to use these evaluation tools in another jurisdiction. We are ready to offer support through summer 2022. Please email csr@calvin.edu or laura.luchies@calvin.edu.