Exploring the Impacts of Mobile Harm Reduction Services in Oakland County, Michigan

Reba Aldaire, BA[1], Jade Ayers, MS[1], Deidre Hurse, PhD, MPA, BSW[1]

[1]Oakland University William Beaumont School of Medicine

Background

Oakland County Health Division (OCHD)'s harm reduction mobile unit launched in 2021 and provides services like wound care, sterile syringes, and pipes to individuals affected by substance use disorder (SUD).

Objectives

Identify the impacts of the OCHD mobile unit from the perspective of the individuals utilizing and providing its services and the barriers to improvement and expansion.

About the Mobile Unit

As reported by OCHD staff, June 2023

- June 2021: OCHD launched its mobile harm reduction program in Pontiac, MI.
- December 2021: Pontiac storefront opens, allowing the mobile unit to shift its focus to new service areas in Ferndale and Hazel Park.
- Mobile unit services include sterile supplies including syringes and pipes. It also dispenses naloxone, test strips, condoms, snacks, and hygiene kits. Wound care is also provided.
- Staffed by a nurse and a social worker, the RV provides referrals to treatment and collaborates with OCHD's brick-and-mortar clinic.

Figure 1: Mobile Unit Service Area

Figure 1. The general service area of the mobile unit at the time of data collection. The south border is Eight Mile Road.

Figure 2: OCHD Mobile Unit

Figure 2. The exterior of the current Mobile Unit which OCHD operates.

Methods

- Qualitative surveys administered to a convenience sample of mobile unit clients after accessing services
- Survey data collection occurred over multiple service days along the mobile unit's regular route on Eight Mile Road in Oakland County, Michigan
- Survey was approximately 25 minutes long and included questions on demographics, health-related behaviors, and client perceptions of the mobile unit
- Survey based on Community Care in Reach's program evaluation survey tool and adapted to OCHD program.[1]
- Semi-structured interviews were conducted with OCHD staff
- Program evaluation used RE-AIM framework, most focused on AIM component[2]

Results

Table 1. Client demographics and survey outcomes (n = 15 unless otherwise noted)

Measure	Result
Age	Mean = 40.9 years (SD = 8.2); Range = 27–55
Annual Income	100% reported annual income < $20,000
Housing Status	67% homeless; 27% living with friends/family; 7% renting
Food Insecurity	53% reported difficulty accessing affordable/nutritious food
Regular Primary Care Provider	13% reported having a provider
Familiar with Overdose Signs	73% reported familiarity
Confidence in Administering Naloxone (n = 14)	100% reported confidence; 1 missing response
Needle Re-use (n = 10)	100% reported decreased frequency of re-use and no re-use of syringes previously used by others; 5 not applicable
Service Adequacy	100% reported sufficient range of services

Figure 3: Accessibility of the Mobile Unit

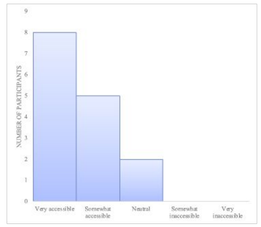

Figure 3. Bar graph of mobile unit clients' responses to the survey question, "How would you rate the accessibility of the mobile unit's services in terms of location and operating hours?"

Figure 4: Client Health Conditions

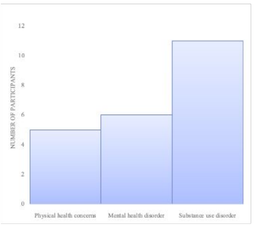

Figure 4. Responses from mobile unit clients to the survey question, "Do you have a history of any of the following? (Check all that apply)." Clients were able to select multiple options.

Table 2: Discussion of Barriers to Care as Reported by OCHD Staff

Category	Comments by OCHD Staff
Legality	"The main barrier is local paraphernal ordinances that prevent us from providing services in vulnerable communities." "I think that more so than staffing is changing the law. Decriminalizing paraphernalia because lots of cities don't want us in their city because they "don't have a problem" and that's the biggest problem. If we were allowed to go to more places, if it was totally decriminalized and we had more money we could easily have two units going out every day, then we would need more staff. There's enough to go around to have two units." "Currently syringe service program statewide legislation is in a sub-committee in the Senate. Currently we are only able to provide outreach in Pontiac, Ferndale and Hazel Park. We are working with the Health and Safety officer in the City of Southfield to provide services under a written agreement."
Funding	"There are pending threats to remove $379 million dollars in funding to the State of Michigan in Federal grants that could impact our grant. Currently, a US District judge issued a temporary restraining order to prevent this."
Staffing	"Staffing for outreach has been a challenge. We do not have the funding for additional staffing. Outreach is limited to once weekly." "Ongoing continuing education and support to staff surrounding mental health resources, de-escalation techniques, trauma informed care, community resources and self-care (would improve the program.)"

Table 1. This table summarizes survey responses from clients of the OCHD mobile harm reduction unit (n = 15 unless otherwise noted). Percentages are shown; missing or non-applicable data are indicated where relevant.
Table 2. This table includes quotations from interviews with OCHD staff related to barriers to service delivery. Quotes are sorted by topic.

Results

OCHD-reported metrics about the mobile unit's reach between January 2023-September 2024:

- 128 encounters
- Client demographics:
  - -72% white, 23% black, 5% other
  - -65% male, 35% female
- 6550 needles distributed
- 260 pipes distributed
- 160 boxes of naloxone distributed

Table 3: Descriptive Thematic Comparison

Themes	Clients	Staff
Service Area	*Are there other places that you think the team should visit?* "No." "They do a good job." [Four specific locations were reported, most in Wayne County.]	"Access [in a rural area] is just more difficult. And they don't necessarily have vehicles to drive down here and get stuff on the regular. Holly is like 30 minutes away, but Holly needs it, Fenton needs it, Burton needs it."
Access	*How does substance use affect your access to medical care?* "I just don't go." "[I] had an abscess last year and kept putting it off until it was really bad [and I] needed the ER." "I am ashamed because of it." "Mental health and getting there."	"Overall, clients are skeptical about going to outside providers for medical care. Mainly due to mistrust, poor treatment with providers in the past, and stigma towards [people who inject drugs]." "[Clients] trust the people on the mobile unit, but they won't go to the actual health department."
Health Impacts	*What effect the mobile unit has had on your overall health?* "Great on mental health." "Wonderful. Good improvement." "No sores from dull needles or abscess." "They have kept me from going to the hospital. Caught me at life-saving moments." "None." "Fair." *What additional services or changes would improve the mobile unit's ability to meet the needs of the community?* "Sometimes I run out [of supplies and] wish I could get more." "Come more often." "Come more frequently." "Come 2 times per day." "More access to hydration mixes… work with an org for showers and water." "Testing HIV and HCV and get meds for it."	"When we first started most were reusing [needles], most were sharing [needles]... out on the street there were needles everywhere. It was ridiculous. Since we started collecting needles and giving clean needles, that's been a drastic change." "Barriers [to healthcare] include lack of insurance, lack of transportation, lack of identification, and not having a phone."
Client-Provider Relationships	*Please share your experiences with the mobile unit staff.* "I am happy to see them when they come out. They are respectful. Some people come out and have prejudice, but not this group." "They are great to me." "Amazing." "They're cool people. I like the help and they don't judge people." "They are amazing. They have kept me going."	"I go as far as to go to people's houses. I have their phone number and they have mine. If I didn't see them, I would call them… That worked to actually go to people's houses."

Table 3. This table shares quotes collected in the survey from interviews with OCHD staff. The column with quotes from clients includes the question that preceded the survey response.

Discussion

Harm Reduction Impacts

The results of this qualitative evaluation indicate that the OCHD mobile unit has positive effects on individuals utilizing and providing its services.

- Clients reported increased access to sterile drug equipment and reduced re-use of needles since the mobile unit program.
- Mobile unit staffers also reported a decreased number of used syringes discarded on the ground.
- The majority of clients reported familiarity with the signs of substance overdose, and confidence in their ability to administer naloxone.
- Participants reported lack of housing (10/15), food insecurity (8/15), and limited access to primary care (13/15).
  - Clients reported that increased food and water resources would be of benefit to this program.

Building Community Trust

The relationships between staff members and clients were characterized by depth and mutual respect.

- While clients reported limited access to traditional primary care, they made repeated visits to the mobile unit.
  - -One client reported, "They are amazing. They have kept me going." Other clients described feeling respected and improvements on their mental health.

Barriers to Expansion

- The greatest challenge faced by the OCHD harm reduction program is the criminalization of drug paraphernalia in the majority of cities within the county.
- OCHD serves the only three cities in the county where the distribution of syringes, pipes, test strips, etc. is legal.
- Michigan House Bill 5178, introduced in 2023 and still pending, proposes the decriminalization of drug paraphernalia distribution by harm reduction organizations.[3]
- Community investment is a necessary piece of securing increased funding and pushing legislative initiatives that would allow the expansion of services that are not currently logistically supported.

Conclusion

Our findings affirm the value of the OCHD harm reduction mobile unit to the community, although the program's impact is limited by the frequency of outings. Increased funding for food and water distribution would further meet client needs. Additionally, the criminalization of drug paraphernalia distribution is an impediment to successful resource delivery.

References

1. Regis C, Gaeta JM, Mackin S, Baggett TP, Quinlan J, Taveras EM. Community Care in Reach: Mobilizing Harm Reduction and Addiction Treatment Services for Vulnerable Populations. *Front Public Health*. 2020;8:501. Published 2020 Sep 25. doi:10.3389/fpubh.2020.00501
2. Shelton RC, Chambers DA, Glasgow RE. An Extension of RE-AIM to Enhance Sustainability: Addressing Dynamic Context and Promoting Health Equity Over Time. *Front Public Health*. 2020;8:134. Published 2020 May 12. doi:10.3389/fpubh.2020.00134
3. Michigan House of Representatives. House Bill No. 5178. Introduced October 18, 2023. Accessed April 20, 2025. https://www.legislature.mi.gov/documents/2023-2024/billintroduced/House/pdf/2023-HIB-5178.pdf

Acknowledgements

We would like to thank Oakland County Health Division for partnering with us for this project. We would also like to acknowledge the OUWB EMBARK Capstone Program for funding this project. We have no affiliations or potential conflict of interests to disclose.