Will it pay off?
ROI models for pharmacy-based methadone for opioid use disorder

Cynthia A. Tschampl, [1] Sage R. Feltus, [2] Jeffrey Bratberg, [3] Elena Soranno, [1] Maureen T. Stewart, [2] Traci C. Green [1]

[1] The Heller School for Social Policy and Management, Brandeis University;
[2] Boston University School of Public Health, Health Law, Policy & Management; [3] University of Rhode Island College of Pharmacy

INTRODUCTION

- Methadone is a highly effective medication treatment for opioid use disorder (MOUD)[1], yet it is underutilized in the US response to the overdose crisis.
- Due to federal laws and regulations, methadone for OUD can only be dispensed by government certified opioid treatment programs (OTPs).[2]
- As of 2022, there were only 2,100 OTPs in the US; 80% of counties and the entire state of Wyoming had zero.[3]
- There is interest in expanding access to methadone delivery into community pharmacies.[4]

OBJECTIVE

The purpose of this study was to conduct a first-of-its-kind return on investment (ROI) analysis for three models of pharmacy-based methadone treatment.

MODEL DESCRIPTIONS

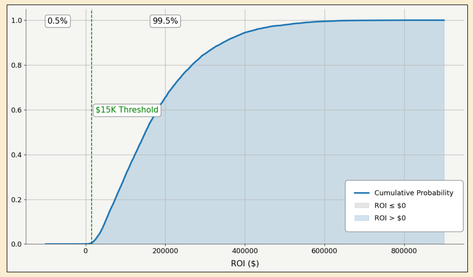
- **Pharmacy-based medication unit:** A partnership between an OTP and a pharmacy to operate an OTP satellite location in the pharmacy.
- **Pharmacy-dispensed model:** Requires federal regulation changes to allow pharmacies to dispense methadone for OUD prescribed by a DEA-registered medical provider.
- **Expanded pharmacy-dispensed model:** Requires changes to federal regulations and builds on the pharmacy-dispensed model by granting pharmacists the ability to bill Medicare and Medicaid for physician-level reimbursement.

METHODS

- Analyses included startup costs plus three years of operational costs and revenue.
- To identify key model components, we reviewed the Liberating Methadone Conference Report and conference recordings[5] and conducted a community advisory board to interview people with experience using methadone.
- Other key informants included pharmacists and independent pharmacy owners, OTP leadership, payers, and state and federal policymakers.
- Literature and commercial websites provided values for costs and revenue inputs not obtained through interviews.
- We used micro-costing methodology to finalize cost and revenue inputs.
- The ROI was conducted from the pharmacy perspective for all models.
- We used Monte Carlo simulation (10,000 iterations) to predict the most likely outcomes of an uncertain event.
- All costs were calculated in 2024 US dollars.

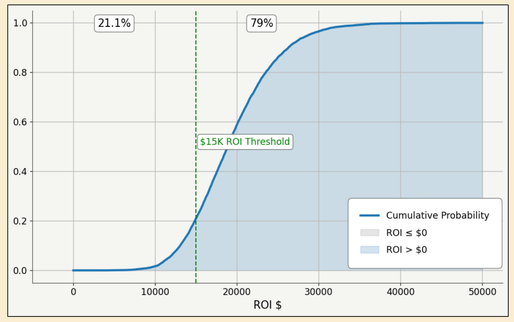
RESULTS

Figure 1. Pharmacy-based medication unit model 3-year net profit at $15,000 ROI threshold



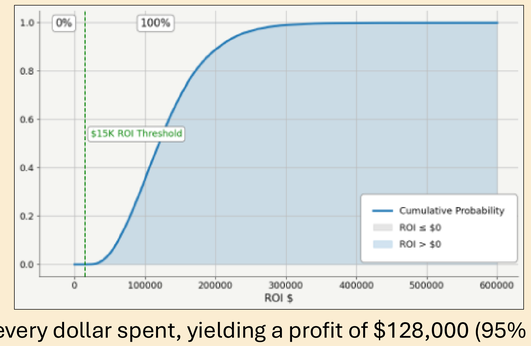
- Pharmacy returns $6.53 for every dollar spent, yielding a profit of $177,000 (95% UI: $26,381-$478,244)
- *A pharmacy would have a 99.5% likelihood of netting $15,000 or more by year three*

Figure 2. Pharmacy-dispensed model 3-year net profit at $15,000 ROI threshold



- $2.05 for every dollar spent, yielding a profit of $19,000 (95%UI: $10,570-$30,923)
- *A pharmacy would have a 99.5% likelihood of netting $15,000 or more by year three*

Figure 3. Expanded pharmacy-dispensed model 3-year net profit at $15,000 ROI threshold



- $2.33 for every dollar spent, yielding a profit of $128,000 (95% UI: $43,119-$261,503)
- *A pharmacy would have a 100% likelihood of netting $15,000 or more by year three*

DISCUSSION

- All business models result in positive ROIs for pharmacies.
- Unlike the pharmacy-based medication unit model, the pharmacy-dispensed and expanded pharmacy-dispensed models require changes to laws and/or regulations.
- Allowing pharmacies to dispense methadone directly would provide pharmacies with an additional revenue channel and increase access to methadone for patients.
- The "expanded" model broadens the scope of practice for pharmacists, providing extra incentives for implementation and more opportunities for reimbursement.

CONCLUSIONS

- All three models of pharmacy-based methadone treatment would be financially sustainable for pharmacies.
- Changes to federal laws or regulations would be needed to expand access to certain pharmacy-based methadone models.
- Expanding the role of pharmacists in pharmacy-based methadone treatment can support financially sustainable models of OUD care.

REFERENCES

1. Santo T, Clark B, Hickman M, Grebely J, Campbell G, Sordo L, et al. Association of Opioid Agonist Treatment With All-Cause Mortality and Specific Causes of Death Among People With Opioid Dependence: A Systematic Review and Meta-analysis. JAMA Psychiatry. 2021 Sep 1;78(9):979–93.
2. Woodruff J, Bratberg J, Feltus SR, Gray HV, Green T, Kelsey S, et al. Pharmacy-based Methadone: Analysis of Current Laws and Regulations [Internet]. Waltham, MA: Brandeis University Opioid Policy Research Center; 2024.
3. Overview of Opioid Treatment Program Regulations by State [Internet]. 2022.
4. Stewart MT, Feltus SR, Bratberg JP, Tschampl CA, Green TC. Key informant perspectives on pharmacy-based methadone treatment for opioid use disorder in the US. Health Affairs. 2025. In press.
5. National Coalition to Liberate Methadone, National Survivors Union, NYU Langone Center for Opioid Epidemiology and Policy. Liberating Methadone: A Roadmap for Change Conference Proceedings and Recommendations [Internet]. New York, NY; 2024 June.

ACKNOWLEDGEMENTS

Support for this project was provided by The Pew Charitable Trusts. The views expressed herein are those of the authors and do not necessarily reflect the views of The Pew Charitable Trusts. We thank Mr. Murray Dawson and Ms. Victoria Mei for graphics and design assistance.

TOOLKIT