

**TO:**

The Honorable Joseline Peña-Melnyk,  
Chair, House Health and Government Operations Committee,  
Maryland House of Delegates

**FROM:**

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**DATE:**

February 28, 2024

**POSITION:**

Favorable

**RE: Public Health – Overdose and Infectious Disease Prevention Services Program (HB 1096)**

Dear Chair and Committee members,

As a group of health economists and health services researchers at the Bloomberg School of Public Health, we conducted an economic evaluation to assess the cost and benefit tradeoffs of investing in a potential overdose prevention site (OPS) in Baltimore City. We believe that findings from this analysis provide evidence to support the passage of House Bill 1096.

HB 1096 empowers community organizations, approved by the Maryland Department of Health in consultation with local health departments, to establish OPSs. OPS is a harm reduction initiative providing a safe space for individuals to consume substances they already possess, ensuring that trained staff are ready to assist if necessary. Besides averting overdose fatalities, OPSs typically offer services such as linkage to treatment and case management.

Considering this bill's provisions and direct and indirect implications, our economic evaluation focused on the primary outcome measure of the cost-benefit ratio, followed by deterministic sensitivity analyses. Our analysis relied on evidence from the published peer-reviewed literature on harm reduction and followed the approach of Irwin A. et al., published in the Harm Reduction Journal in May 2017 [1]. We used a societal perspective in this analysis. To model the expected costs and benefits of the program, we adopted the findings from OnPoint (the OPS located in New York), Insite (the OPS located in Vancouver, Canada), and data on people who inject drugs (PWID) in Baltimore, Maryland [2,3].

Our base case analysis revealed that a single OPS would save approximately \$14.35 million annually at an annual cost of \$2.05 million, resulting in a cost-benefit ratio of \$7.00 for every \$1 spent and a net potential savings of \$12.3 million (Table 1). This represents a significant proportion of the harm reduction budget of the Maryland Department of Health. More specifically, the net savings represent over 8% of the Infectious Disease Prevention and Health Services Bureau budget, which is \$139.1 million [4].

The sensitivity analyses included the most influential parameters of the cost-benefit ratio (Table 2; Figure 1). These comprised productivity of the remaining lifetime of PWIDs (total annual productivity vs. non-market productivity), distribution of the overdose deaths around the OPS (considering the highest reported density vs. equal distribution across Baltimore City), proportion of HIV-positive PWIDs, proportion of HIV-positive PWIDs using Baltimore City-specific data, and the possible cost variations related to establishing and operating an OPS (employing purchasing power parity vs. other methods) (Table 2).

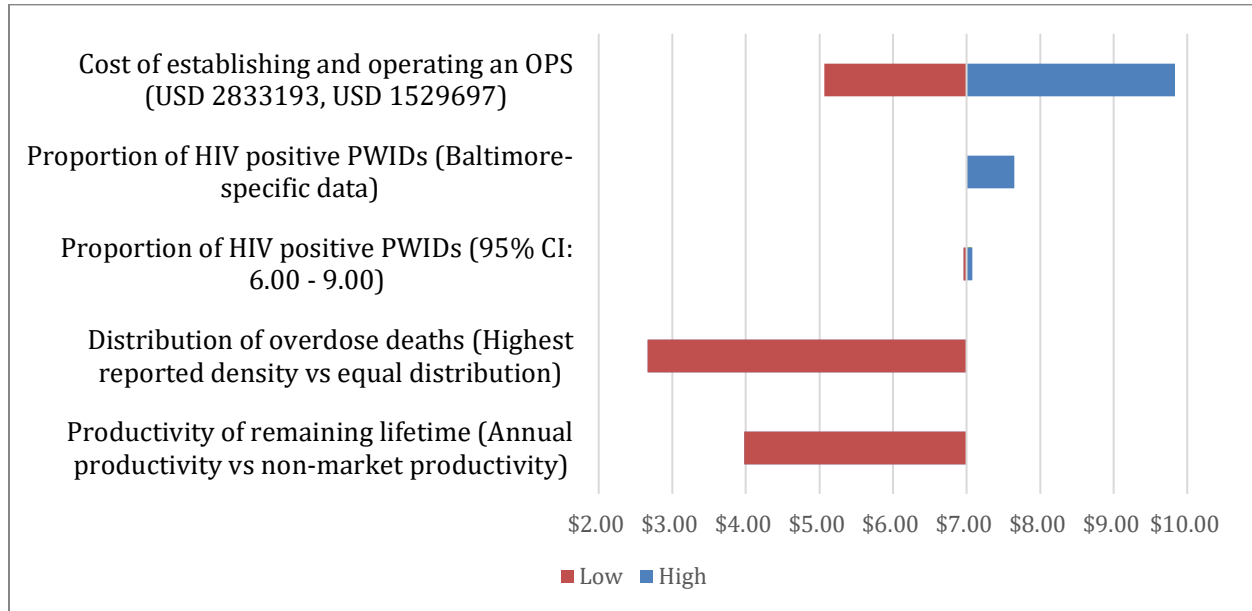
**Table 1: The costs, benefits, and the cost-benefit ratio results**

Base Case Analysis		
<b>Total Costs</b>		\$2,050,517
	Annual Operating Cost	\$1,885,265
	Annualized Upfront Cost	\$165,252
<b>Total Savings</b>		\$14,354,621
	HIV	\$671,256
	Hepatitis C	\$1,897,865
	Skin and Soft Tissue Infections	\$21,164
	Overdose Deaths	\$9,608,111
	Ambulance Calls	\$10,734
	Overdose Related ER Costs	\$666,163
	Overdose Related Hospitalization Costs	\$209,086
	Medication-Assisted Treatment	\$1,270,242
<b>Summary</b>		
	Cost-Benefit Ratio: \$1 spent generates	\$7.00
	Net savings	\$12,304,104

**Table 2: Parameters used in the deterministic sensitivity analysis and results**

SN	Parameters	Base Case Value	Low	High
1	Productivity of remaining lifetime (Annual productivity vs non-market productivity) [5]	\$7.00	\$3.98	\$7.00
2	Distribution of overdose deaths (Highest reported density vs equal distribution) [6,7]	\$7.00	\$2.67	\$7.00
3	Proportion of HIV positive PWIDs (95% CI: 6.00 - 9.00) [8]	\$7.00	\$6.96	\$7.08
4	Proportion of HIV positive PWIDs (Baltimore-specific data) [9]	\$7.00	\$7.00	\$7.65
5	Cost of establishing and operating an OPS (USD 2833193 vs. USD 1529697) [10,11]	\$7.00	\$5.07	\$9.83

**Figure 1: Tornado diagram with the results of the deterministic sensitivity analysis**



For additional sources, detailed methodology, or questions about methods and limitations, please don't hesitate to contact me at [samandika@jhu.edu](mailto:samandika@jhu.edu) or my co-author at [amos@lawenforcementaction.org](mailto:amos@lawenforcementaction.org). Please note that the views expressed here are our own and do not necessarily reflect the policies or positions of Johns Hopkins University.

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