

# Demonstrating the Value of Behavioral Health Care Access Programs



Legislators and policy makers often ask about the Return on Investment (ROI) of Access Programs. In other words, they want to know how much money does the Pediatric Mental Health Care Access (PMHCA) and the Screening and Treatment for Maternal Mental Health and Substance Use Disorders (MMHSUD) program save? Determining ROI requires a complicated economic analysis that may not be possible for individual programs. These programs also primarily offer access, not treatment; ROI is not the correct measure of access. Even making an ROI argument may imply that saving lives is not a good enough reason, and in fact, that saving money is more important than saving lives. While calculating ROI may not be possible, it is still important to show the value of a program. This tool outlines how states can show value of the PMHCA and MMHSUD programs using approaches other than an ROI analysis including data points, key messaging, and measures for estimating value.

## Data points

- Suicide is a leading cause of pediatric death and is increasing.
- Mental health and substance use disorders are the leading cause of maternal mortality in the United States.

## Key messaging:

- Children and perinatal individuals are dying because of the lack of access to behavioral health care.
- PMHCA and MMHSUD programs exist because of the lack of access to child and perinatal behavioral health care.
- These programs increase access to evidence-based treatment that parents and kids often cannot access.
- These programs increase provider self-assessed competency.
- These programs do not cost a lot of money for how many patients are covered.
- Providers find these programs essential.



## Measures to show value:



**Cost of untreated illness**



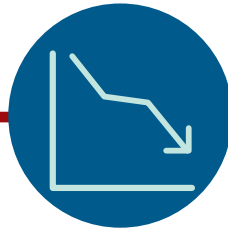
**Cost of program per patient**



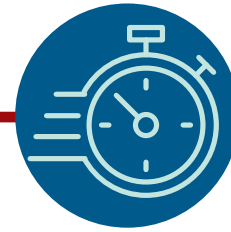
**Patients covered by enrolled/participating providers**



**Number of practices/providers enrolled and using the program**



**Numbers that show the negative impact of not having a program (deaths, outcomes, etc.)**



**Timeliness of patient being seen for a face-to-face consult with a psychiatrist**

(ex: 2 weeks in Massachusetts vs. 3 to 6 months to wait for an appointment with a psychiatrist)



**Extent to which providers call and manage complicated illness, which shows they are learning how to address/manage complicated cases in the future.**

Legislators and policy makers ask about cost per service delivered. The goal of access programs is to build capacity; therefore, measuring cost per services is not accurate or evidence based. In fact, Massachusetts data shows that for perinatal programs, the more people call, the more likely they are to treat complicated illness (Masters et al 2023); therefore, each encounter has an impact beyond that service.

## Example Calculations to Show Value

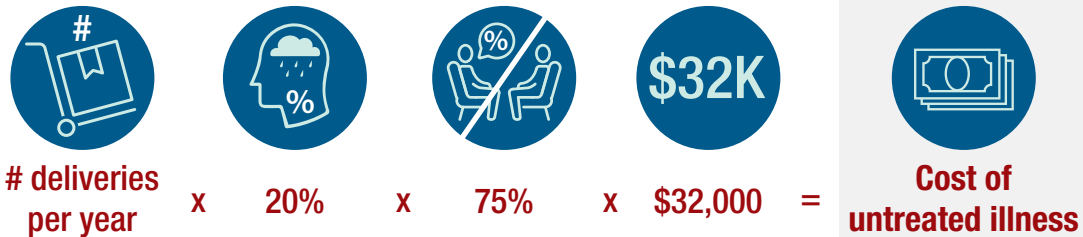
### Perinatal programs: Cost of untreated illness vs. cost per patient covered

#### Cost of untreated illness

Estimate the cost of untreated illness for the perinatal program for states by using the following data from prior studies:

- Number of deliveries per year
- Percent with a mood or anxiety disorder (1 in 5, 20%) (Vesga Lopez et al.)
- Number that will not get treatment without a program in place (75%) (Byatt et al.)
- Cost of \$32,000 per mother-child dyad per year for untreated illness (Zivin et al.)

#### FORMULA:



The formula diagram shows five circular icons in a row. From left to right: 1. A shopping cart with a '#' symbol, labeled '# deliveries per year'. 2. A head with a cloud and a '%' symbol, labeled '20%'. 3. Two people sitting at a table with a '%' symbol and a diagonal line through it, labeled '75%'. 4. A circle with '\$32K', labeled '\$32,000'. 5. A stack of money, labeled 'Cost of untreated illness'. The icons are separated by 'x' symbols, and the final result is preceded by an '=' symbol.

$$\# \text{ deliveries per year} \times 20\% \times 75\% \times \$32,000 = \text{Cost of untreated illness}$$

*Example:* Massachusetts with 72,000 deliveries per year

$$72,000 \times 20\% \times 75\% \times \$32,000 = \$345.6 \text{ Million in untreated costs}$$

#### Cost per patient covered

Estimate the cost per patient using the total program cost divided by the number of deliveries per year:



The formula diagram shows three circular icons in a row. From left to right: 1. A stack of coins with a '\$' symbol, labeled 'Program cost'. 2. A shopping cart with a '#' symbol, labeled '# deliveries or children'. 3. A stack of money, labeled 'Annual cost for patient covered'. The icons are separated by a division symbol '÷' and an equals sign '='.

$$\text{Program cost} \div \# \text{ deliveries or children} = \text{Annual cost for patient covered}$$

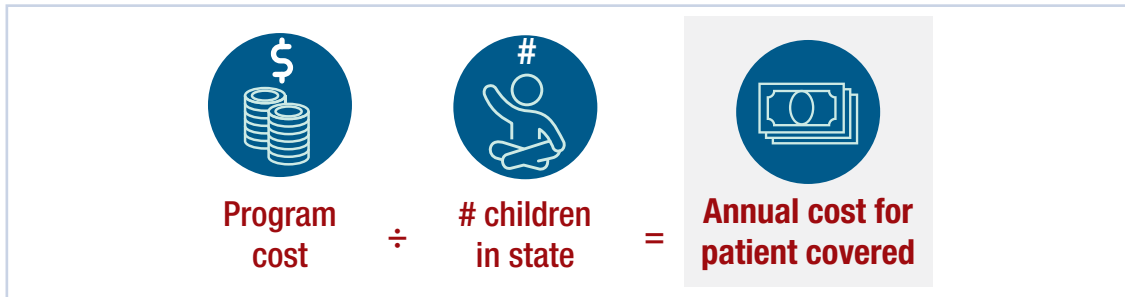
*Example:* Massachusetts, with an annual program cost of \$1,000,000 and 72,000 deliveries per year.

$$\$1,000,000 \text{ program cost per year} / 72,000 \text{ deliveries} = \$13.89 \text{ per patient/year}$$

then  $\$13.89 / 12 \text{ months} = \$1.16 \text{ per month per patient covered}$

## Child Programs: Cost per patient covered

Estimate the cost per patient using the total program cost divided by the number of children in the state.



*Example:* Massachusetts, with 1,500,000 children

$\$3,400,000$  program cost per year / 1,500,000 =  $\$2.27$  per year per child/year  
or  $\$2.27/12$  months =  **$\$.19$  per child per month**

## Perinatal and Child Program Utilization

States can determine utilization of the program by calculating how many practices or providers are enrolled, what % of state (# enrolled/total in state) and number annually using the program.

*Example:* Massachusetts perinatal program:

- 200 obstetric practices in the state and 160 enrolled  
( $160/200=80\%$  are enrolled)
- Of 160 enrolled, 80 are annually using program  
( $80/160=50\%$  of enrolled are using program at least annually)

*Example:* Massachusetts child program:

- 504 practices enrolled (>98% of known practices)
- 80% annual utilization by practice
- 60% annual utilization by pediatricians

## References:

[Psychiatric disorders in pregnant and postpartum women in the United States - PubMed \(nih.gov\)](#)

Byatt N, Levin L, Ziedonis D, Moore Simas TA, Allison J. Enhancing Depression Care in Obstetric Settings. *Obstetrics & Gynecology*. 2015 Nov; 126(5):1048-1058.

Masters GA, Yuan Y, Li N, Straus J, Moore Simas TA, Byatt N. Improving Front-line Clinician Capacity to Address Bipolar Disorder Among Perinatal Individuals: A Longitudinal Analysis of the Massachusetts Child Psychiatry Access Program (MCPAP) for Moms. *Archives of Women's Mental Health*. 2023 May-Jun; 26(3):401-410.

Luca, D. L., Margiotta, C., Staatz, C., Garlow, E., Christensen, A., & Zivin, K. (2020). Financial Toll of Untreated Perinatal Mood and Anxiety Disorders Among 2017 Births in the United States. *American Journal of Public Health*, (0), e1-e9. <https://www.ncbi.nlm.nih.gov/pubmed/32298167>