# Assessing the Incremental Health Care Burden of Post-Partum Depression

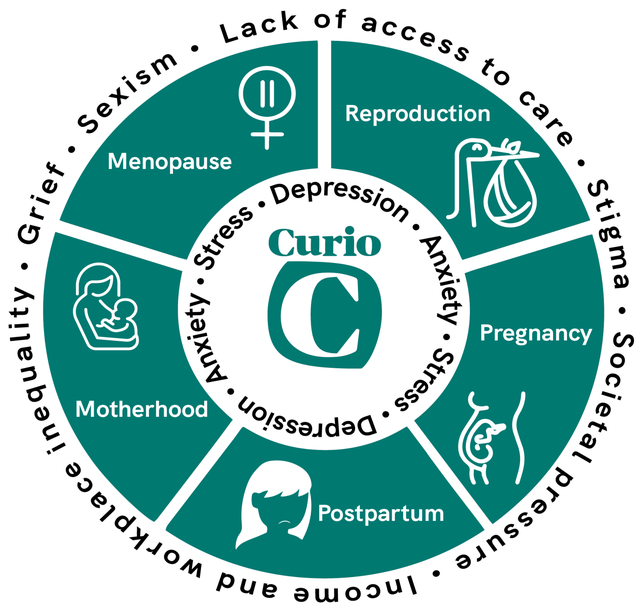
Sid Shankar, Amrik Shah, Indira Malladi, Shailja Dixit

## Background

Management and treatment of postpartum depression (PPD) incur a significant utilization of health care resources, including costs associated with therapy, medications, and both in- and out-patient visits. Estimates of these costs fail to account for incremental costs attributable to PPD.

## Objective

To determine the prevalence of PPD and estimate the incremental costs attributable to PPD by contrasting PPD patients' claims vs non-PPD patients' claims.




## Method

Two large commercial claims datasets (A and B) were used to estimate PPD prevalence and to summarize claims costs by PPD diagnosis status. Longitudinal claims data (4+ years) were curated with the following conditions: (i) pregnancy indicator at least 2 months prior to birth, (ii) a minimum of 10 months of medical history pre-birth, and,
(iii) a minimum of 6 months of medical history after birth (or until PPD diagnosis if earlier). Data A yielded 112,154 women, of whom 20,287 (18%) went on to develop PPD. Data B had ~440k women of whom ~93k (21%) went on to develop PPD.

For Data A, claim codes were used to categorize the costs (for the period 10 months prior to birth and 6 months after birth) for "mental health", "birth-related" and "Total".
Given the richer information in Data B, the costs were categorized by "in-patient" (includes clinic and office visits), "out-patient," and "Total."

## Results

Claims database A showed significantly higher costs for PPD patients, $120.3k higher per patient. The incremental "mental health" costs were ~$41k ($21.1k + $20k, Table 1). This may be underestimated as diagnostic codes may not have fully captured the relevant items. Interestingly, the costs related to birth were similar for PPD and non- PPD women ($30k for PPD vs $28k for non-PPD). Though the categorizations differed from Claims database B (not shown), the findings were consistent with a higher burden for PPD patients ($9.7k incremental).

## Conclusion

The estimated prevalence of PPD is similar in both databases (18% and 21%) and is consistent with published literature, with the caveat that a significant percentage of women may be undiagnosed. Incremental costs were significantly higher for PPD patients, and the observed difference was only partially due to "mental" health care. The results of this study highlight the need for early identification of at-risk women and timely intervention.

Table 1: Incremental Costs of PPD Patients

| PPD Diagnosis | | PPD= YES (N = 20,287) | PPD= NO (N = 91,867) | Incremental Costs |
|---|---|---|---|---|
| Costs up to birth | Non-mental health | $170k | $111K | 59K |
| | Mental health | $21.5K | $0.4K | 21.1K |
| Costs post birth | Non-mental health | $145.6K | $125.4K | 20.2K |
| | Mental health | $20.8K | $0.8K | 20K |

Scan to learn more about Curio

Sponsorship: This study was funded by Curio Digital Therapeutics, Inc.