

Background

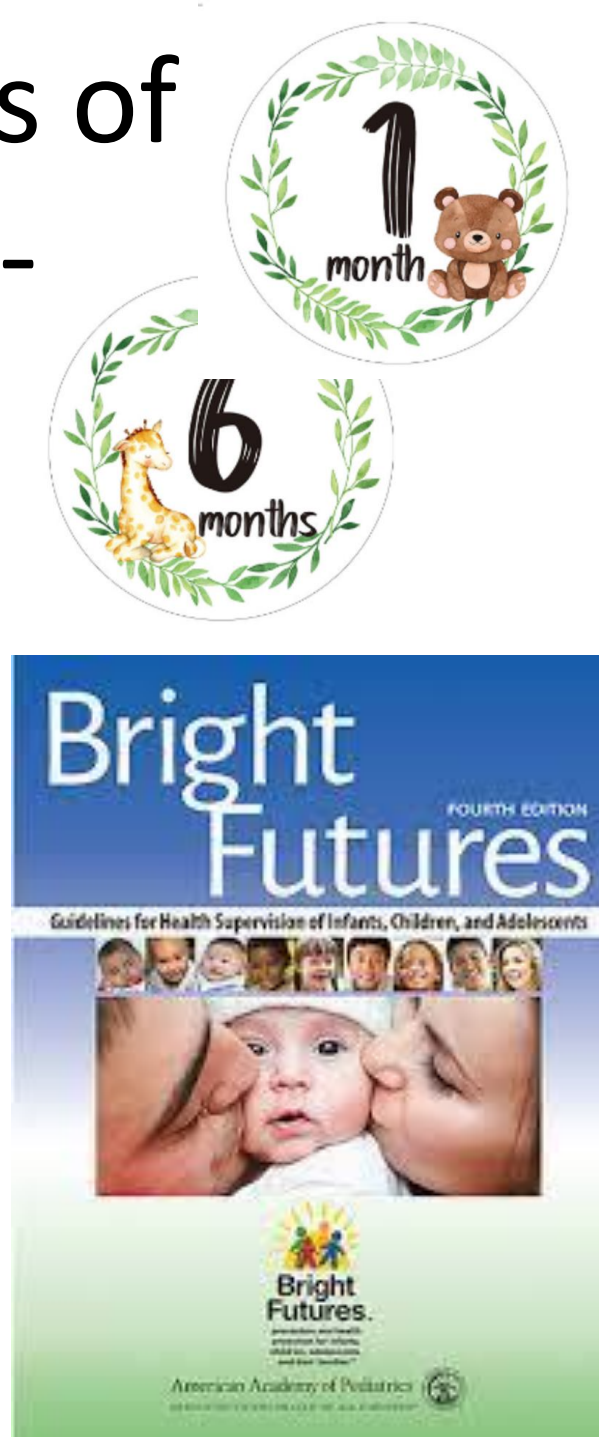
- The importance of screening for postpartum depression (PPD) in pediatric clinics is becoming increasingly recognized (1).
- Previous studies have shown different trajectories of PPD over time (2,3,4) and provide evidence of an association between social determinants of health and PPD risk (5,6).
- Few studies have compared the use of different PPD screeners over time or examined the role of social determinants in modifying the change in different PPD screeners over time.

Objectives

- Identify the relationship between different PPD screener scores at 1-month and 6-month visits
- Analyze the relationship between SDoH and risk for PPD on different PPD screeners

Methods

- Retroactively collected data from EMRs of pediatric patients who presented for 1-month and 6-month well child checks.
- Used the Patient Health Questionnaire-2 (PHQ-2) and the Edinburgh Postnatal Depression Scale (EPDS) as screeners for postpartum depression and Bright Futures for social determinants.
- Compared PHQ-2 and EPDS Scores at 1-month and 6-month visits in parents who had at least one social determinant risk factor with those who did not endorse any risk factors.



1 → 6-month PPD Scores: Full Sample

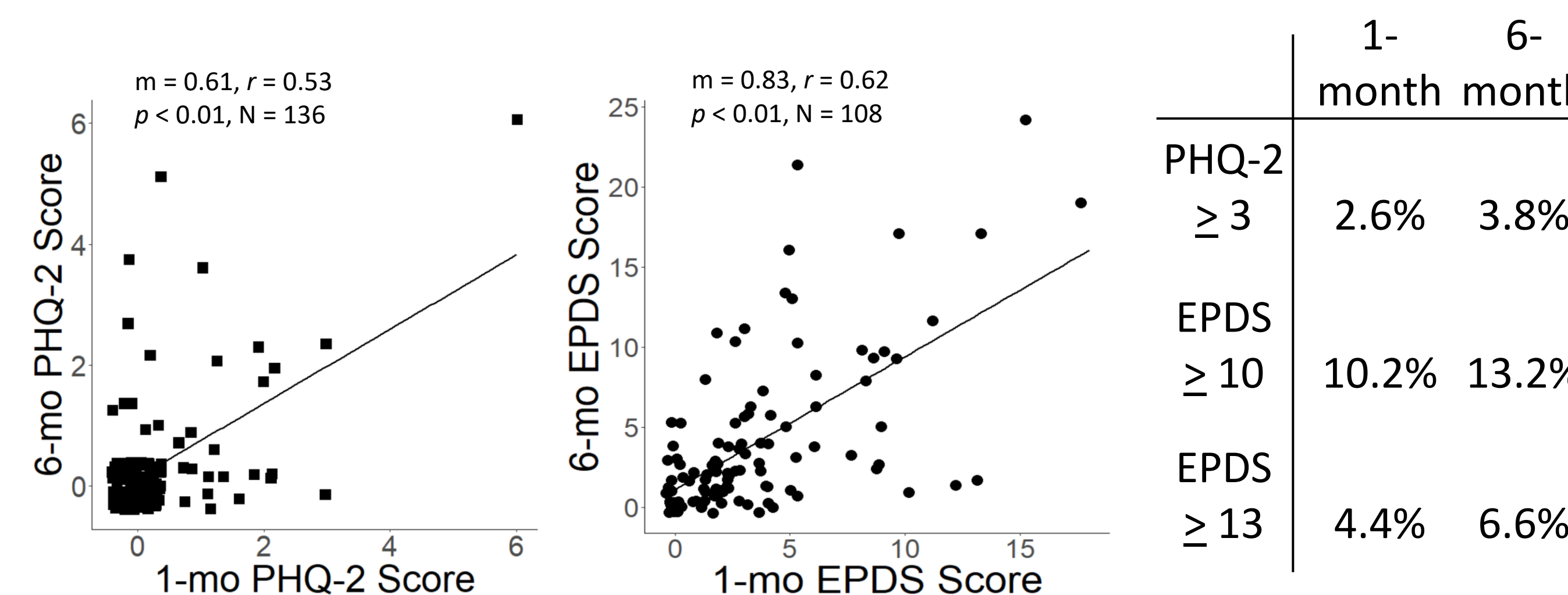


Figure 1. Association between A) PHQ-2 scores and B) EPDS scores at the 1-month and 6-month visits. C) The % of participants meeting threshold for PPD on each screener at 1 and 6 months (Full Sample).

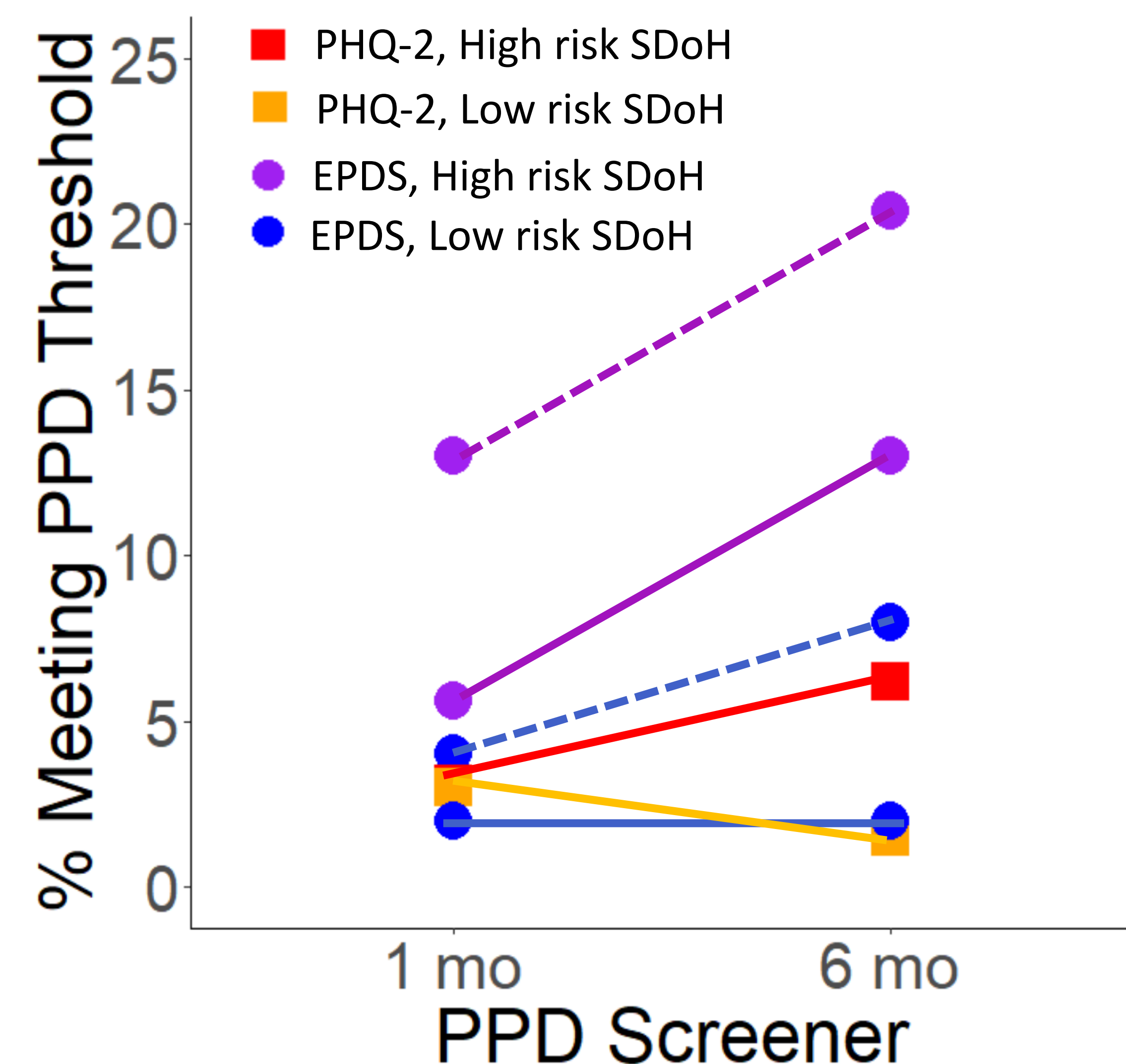
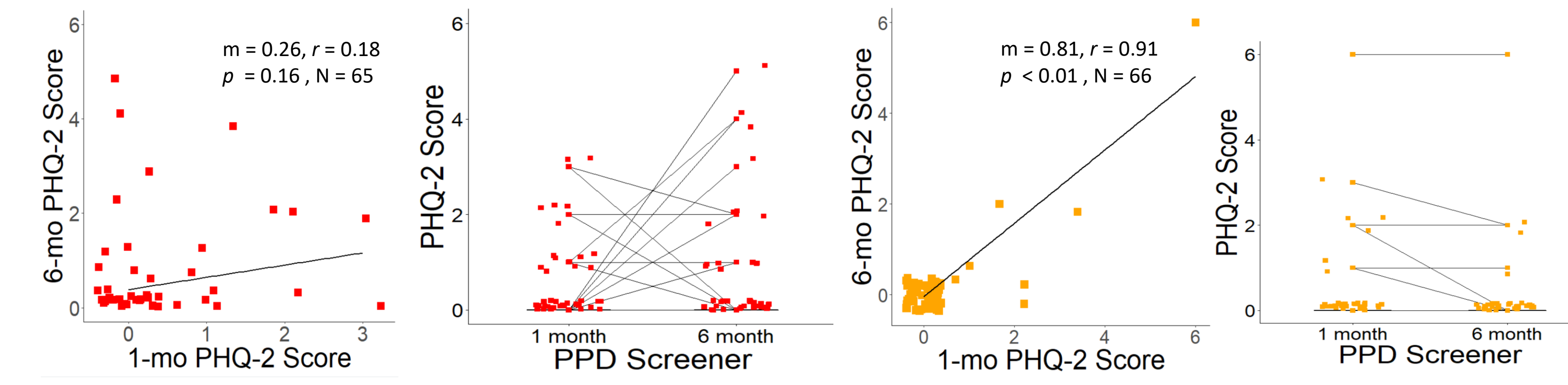


Figure 3. Postpartum depression trajectories by high and low risk social determinants group. Points connected by straight lines represent % of parents who met the "likely depressive" threshold (PHQ-2 ≥ 3 , EPDS ≥ 13) for a positive PPD screen at 1-month and 6-month visits. Dashed lines represent EPDS threshold ≥ 10 ("probable depression").

Results

1 → 6-month PHQ-2 Scores: High and Low Risk SDoH



1 → 6-month EPDS Scores: High and Low Risk SDoH

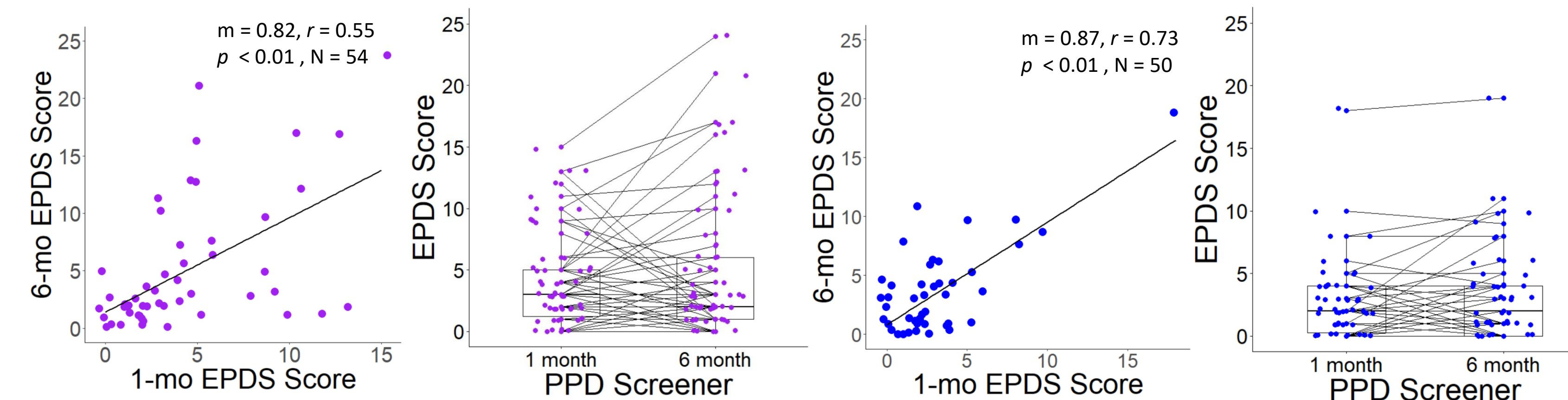


Figure 2. Association between PPD screener scores at the 1-month and 6-month visits in high and low risk SDoH groups. A) PHQ-2 scores, High risk SDoH group. B) PHQ-2 scores, Low risk SDoH group. C) EPDS scores, High risk SDoH group. D) EPDS scores, Low risk SDoH group.

Results: Summary

- 1-month PPD screening scores were positively correlated with 6-month PPD screening scores on both the PHQ-2 and the EPDS.
- A higher percentage of participants screened positive for PPD on the EPDS compared to the PHQ-2 at both 1 and 6-month visits.
- High risk SDoH scores at 1-month were significantly associated with screening positive for PPD at 6 months on both the PHQ-2 and the EPDS (PHQ-2 ≥ 3 : $\chi^2 = 12.2, p = 0.03$; EPDS ≥ 10 : $\chi^2 = 16.0, p < 0.01$; EPDS ≥ 13 : $\chi^2 = 19.7, p < 0.01$).
- 1-month and 6-month EPDS scores, but not PHQ-2 scores, were significantly correlated in the high risk SDoH group.

Conclusions

- Our findings highlight the importance of repeated screening for PPD at early-life visits in the pediatric clinic.
- Given the association between SDoH and PPD, individuals who screen positive for one should be screened for the other.
- Additional work is needed to support our finding that SDoH may modify PPD trajectory with different screeners.

References

- Marian F. Earls, Michael W. Yeaman, Gerni Matsson, Jason Rafferty, COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH, Rebecca Baum, Theresa Gambon, Arthur Lavin, Lawrence Wissow, Incorporating Recognition and Management of Perinatal Depression into Pediatric Practice. *Pediatrics* January 2019; 143 (1): e20183259. 10.1542/peds.2018-3259
- Wilman, A., Arfors, C., Radis, S., Cox, J., Fransson, E., Skalkidou, A. Characteristics of women with different perinatal depression trajectories. *J Neuro Res*. 2020; 98: 1268-1282. <https://doi.org/10.1002/jnr.24390>
- Santos, H., Tan, X., & Solomon, R. (2017). Heterogeneity in perinatal depression: how far have we come? A systematic review. *Archives of women's mental health*, 20(1), 11-20. <https://doi.org/10.1007/s00272-016-0501-8>
- Parade, S.H., Blankson, A.N., Leekes, E.M., Crockerberg, S.C., and Faldowski, R. (2014). Close Relationships Predict Curvilinear Trajectories of Maternal Depressive Symptoms over the Transition to Parenthood. *Fam Relat*, 63: 206-218. <https://doi.org/10.1111/frel.12065>
- Adynski, H., Zimmer, C., Thoop, J., & Santos, H. P., Jr (2019). Predictors of psychological distress in low-income mothers over the first postpartum year. *Research in nursing & health*, 42(3), 205-216. <https://doi.org/10.1002/nur.21943>
- Dubey, A., Chatterjee, K., Chauhan, V. S., Sharma, R., Dangi, A., & Adhwaray, A. (2021). Risk factors of postpartum depression. *Industrial psychiatry journal*, 30(Suppl 1), S127-S131. <https://doi.org/10.4103/0972-6748.328803>