The Influence of Romantic Partners’ Depressive Symptoms on each other’s Likelihood of Developing Type 2 Diabetes Mellitus.

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Background
Diabetes is a global health challenge, estimated to impact 451 million adults worldwide (Cho et al., 2018). Currently, the prevalence of diabetes is projected to rise to 693 million by 2045 (Cho et al., 2018). Depressive symptoms are associated with the onset of type 2 diabetes mellitus (DM2; Schmitz et al., 2016). Furthermore, spousal depressive symptoms impact DM2 treatment adherence (Anderson et al., 2016). However, spousal depressive symptoms have not yet been examined with regards to their association with DM2 incidence. The purpose of this study was to determine if spousal depressive symptoms are associated with the onset of DM2. Spousal depressive symptoms were hypothesized to predict DM2 incidence.

Methods
Data came from the Health and Retirement Study (HRS), a nationally representative sample of adults in the US. In this study, participants were 1,141 romantic couples who did not have DM2 at baseline (2006) and did not report a spousal change between 2006 and 2014. Depressive symptoms were measured at baseline, and DM2 status was assessed at follow-up (2010, 2014).

Results
In total, 213 participants developed DM2 after 2006. Depressive symptoms for male respondents in 2006 were not significantly correlated with their partners’ DM2 status at follow-up, $r_s(1139) = .05, p = .069, OR = 1.09$. In contrast, depressive symptoms for female respondent in 2006 were not significantly correlated with their partners’ DM2 status at follow up, $r_s(1139) = .003, p = .931, OR = 1.01$.

Conclusion
Although the study findings did not support the hypothesis, these preliminary analyses suggest the possible presence of an association between women’s DM2 incidence and the depressive symptoms among their husbands. Future work will control for respondent’s own depressive symptoms. Further examination of the spousal experience of depressive symptoms in relation to the development of DM2, especially with regards to gender differences may provide a greater understanding of the complexities surrounding this disease.