fact detected by the questions in this study. These data therefore indicate that services would be unwise to implement these questions, in the way conducted in this study, if they consider that missing around 80% of women with a mental health difficulty is problematic.

## References

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## Author's reply

Thank you for your interest in our study. Matthey & Della Vedova have focused on the effectiveness of the Whooley questions in identifying any mental disorder, and we agree, this is an important focus for case identification tools as mental disorders in pregnant women are common. We are not aware of any comparable studies examining the effectiveness of tools to identify 'any disorder'; most focus either only on identification of depression or anxiety disorders. We agree that the sensitivity of the Whooley questions is low for 'any disorder'; there is always a trade-off between sensitivity and specificity and the challenge of designing a short but sensitive screening instrument, particularly for 'any disorder' (but also for depression) remains.

In the meantime, as far as clinicians are concerned, it may be useful to be aware that the positive predictive value (probability that a woman endorsing one Whooley question has a mental disorder) of the Whooley questions, in a population such as ours with a high prevalence (around 25%) of disorders (including

depression, anxiety disorders, eating disorders, obsessive-compulsive disorder, post-traumatic stress disorder and other disorders), was 66% (or 80% if both Whooley questions are endorsed). Subsequent assessment by a general practitioner or other trained professional is essential – as National Institute for Health and Care Excellence guidance in 2014 highlights,<sup>2</sup> any tool used should not be used in isolation, but rather used in the context of a general discussion of mental health, which should include mental health history and treatment (and response to previous treatment) to facilitate appropriate intervention.

We hope that a short tool to identify presence of a mental disorder in maternity populations will be developed and validated soon, with a higher sensitivity, for use in maternity populations. It is certainly needed given, as Pawlby *et al* highlight in their letter, the prevalence of mental disorders in pregnant women is alarmingly high. We will be developing a predictive tool, and examining its effectiveness in different populations in England, that we hope will be useful.

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