analysis: changing the previous pregnancy history in the screening program for preeclampsia trial data to reflect the effect of aspirin. We examined the following 3 policies:

1. Ignore aspirin prophylaxis in the previous pregnancy. This could result in a decrease in overall detection rate of 5% to 10% and a reduction in screen-positive rate of around 1%; in the subgroup that had received aspirin in their previous pregnancy, the decrease in detection rate could be as high as 40%.

2. Continue treatment with aspirin. All women treated with aspirin in their previous pregnancy because of increased risk of preterm PE, irrespective of whether they developed PE or not, should also be treated with aspirin in their current pregnancy; such a policy could result in doubling of women taking aspirin.

3. Consider women who received aspirin in their previous pregnancy as nulliparous. This may be the preferred option because it would result in only a small decrease (2%–3%) in overall detection rate and small increase (<1%) in screen-positive rate; in the subgroup that had received aspirin in their previous pregnancy, the decrease in detection rate could be as high as 10%.

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Competing risks model for prediction of preeclampsia in women who took aspirin prophylaxis in a previous pregnancy

We thank Professors Wright and Nicolaides for their detailed comment concerning our recent question about preeclampsia screening in parous women.1,2

Following the demonstration of the high performance of the competing risks model for the prediction of preeclampsia, associated with the significant efficacy of aspirin in the prevention of preterm preeclampsia in women identified with this model, we wished to address the question of how to manage women with a positive screening in their previous pregnancy who took aspirin accordingly.

We agree that the preferred approach would be to consider women who had received aspirin in their previous pregnancies as nulliparous, particularly those women who did not develop preterm preeclampsia. With the risk of preterm preeclampsia being relatively low in these women and the Fetal Medicine Foundation (FMF) algorithm model combining several biomarkers of preeclampsia aside from obstetrical history, we agree that performing the screening test would be a more efficient approach than recommending aspirin to these women. In addition, we agree with Professors Wright and Nicolaides that ignoring aspirin prophylaxis in the previous pregnancy could result in a decrease in overall predictive performance in this population. Considering these women as nulliparous for the early FMF preeclampsia screening would most likely provide similar prediction efficiency.

In the same line of thought and considering the role of the paternal effect in preeclampsia, we would also suggest that primipaternity be further considered in the overall preeclampsia risk calculation. In the current FMF algorithm, women with new partners should also be considered as nulliparous because a change of partner increases the risk of preeclampsia for women without a history of the condition.3

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Prediction of obstetrical and fetal complications

TO THE EDITORS: We read with interest your article on using electronic health record data to predict obstetrical and fetal complications. You referenced our work describing the development of an automated electronic maternal early warning system. We agree that this report did not provide temporal data or performance characteristics.

However, we subsequently published the test characteristics of our automated system (AWOB, AlertWatch, LLC, Ann Arbor, MI) in predicting severely morbid postpartum hemorrhage (sPPH). Our electronic system was compared with a nurse-driven early warning system that used verified vital signs meeting select thresholds. Only data recorded after neonatal delivery were included in the performance analysis. In contrast to other studies, we defined a “true positive” as an alert at any point within 24 hours after a delivery complicated by sPPH, including alerts sent after sPPH was recognized. Alerts occurring after the recognition of sPPH can still hold clinical value. For example, an alert may identify a patient that remains inadequately resuscitated. Although the nurse-driven early warning system was more sensitive (75.0% [95% confidence interval (CI), 67.3–82.7] vs 60.8% [95% CI, 52.1–69.6]), this assumes that the nurse notified the clinical care team of the abnormal vital signs. The automated system detected 10 sPPH events which were missed by the nurse-driven system. Notably, 4 of these events were detected because the automated system used vital signs taken directly from the patient monitoring network before nursing validation into the electronic health record. Of clinical importance, the automated system is not subject to heuristic biases and will not hesitate to trigger if criteria are met. The automated system is not subject to heuristic biases and will not hesitate to trigger if criteria are met. The automated system is not subject to heuristic biases and will not hesitate to trigger if criteria are met.

In contrast to other studies, we defined “true positive” as an alert at any point within 24 hours after a delivery complicated by sPPH. This would equate to a capture rate (as defined in your article) of 37.5% for sPPH using our alerting thresholds. We agree that different triggers, outcome definitions, and notification strategies make comparisons with other maternal early warning systems challenging.

We applaud your work and agree that automation of maternal early warning systems has the potential to improve maternal care.

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