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## Reply to: The incorporation of telehealth in high-risk pregnancy follow-up needs tailored optimized care scheduled in a strict care protocol



We thank Carbillon et al for their interest in our published work. We agree with the authors on the importance of tailoring prenatal care to individual patients' medical conditions and the need for greater specificity in professional recommendations for prenatal care delivery.

During the COVID-19 public health crisis, our institution, like many across the world, rapidly adopted modified prenatal visit schedules to reduce the risk of viral exposure and preserve constrained medical resources. Our previously published COVID-19 prenatal care model was designed by an interprofessional team, including maternal-fetal medicine specialists, obstetrician-gynecologists, family medicine physicians, and certified nurse-midwives, and was reviewed by patient advocates. The low-risk patient schedule included 8 total prenatal visits (4 in-person and 4 virtual), with an additional appointment for the anatomy ultrasound.<sup>1</sup> This COVID-19 care model was based on randomized controlled trial data supporting the use of modified frequency visit schedules and telemedicine in low-risk maternity populations.<sup>2,3</sup> Less-intense prenatal care models for low-risk patients have been used by peer countries with better maternity outcomes than the United States and have been recommended by maternity care professionals and public health leaders since 1989.<sup>4</sup>

Our guidelines specified patients who were appropriate for the COVID-19 prenatal care model.<sup>5</sup> All patients without medical and pregnancy comorbidities and many of those with medical conditions (eg, well-controlled hypertension) were eligible for the new model. Patients with more complex medical conditions worked individually with their maternity care professionals to determine an appropriate frequency and modality of prenatal visits, balancing the need for evidence-based prenatal care services and the risk of viral exposure. Most patients experienced some change in their prenatal care delivery (eg, reduction in the number of in-person visits or conversion of some visits to telemedicine), while maintaining the needed in-person services such as ultrasounds and laboratory testing.

In our assessment of the COVID-19 prenatal care model, we report aggregate data from all patients who sought care at our institution, including those with and without medical comorbidities or pregnancy complications. The utilization data presented show the protocol was adhered to for many patients, resulting in decreased institutional median total visit counts; however, we did not calculate individual patients' visit attendance. Similarly, survey data include all patients and

providers. These results give a broad perspective on the experiences with the new prenatal care model during the pandemic, including the use of telemedicine for routine prenatal visits. Future studies are needed to understand patients' and providers' perspectives after the acute public health crisis, when the balance of risks and benefits may be different.

Outcomes data from new prenatal care models will further need to be carefully assessed, accounting for individual patients' medical conditions and their preferences; however, current data in the literature are insufficient to address the authors' question about the effects of new prenatal care models on health outcomes. The meta-analysis referenced by the authors includes heterogeneous studies of birth outcomes observed in multiple countries across the globe during the COVID-19 pandemic. This study documented worsening outcomes in low- and middle-income countries, including higher rates of stillbirth and neonatal death, during the pandemic; however, there was no increase in adverse pregnancy outcomes in high-income countries, aside from higher rates of postpartum depression. Studies included in the meta-analysis use flawed study designs that do not account for considerable confounding from the economic and social effects of the public health crisis. In addition, these studies do not report on prenatal care utilization, including receipt of recommended services, and therefore cannot independently assess the effect of changing prenatal care models on care outcomes.<sup>6</sup>

During the acute, early weeks of the COVID-19 pandemic in the United States, maternity care leaders had to urgently develop new approaches to care delivery, using the best available evidence, to balance individual patients' need for prenatal care, and community- and population-level infection control measures. Prenatal care guideline developers nationally and in local healthcare systems, recognized that models of care developed during this acute public health crisis would require modifications later. New care models can build on lessons learned during the pandemic to include further care tailoring and incorporating patient preferences. A national stakeholder panel to redesign prenatal care, led by the American College of Obstetricians and Gynecologists in collaboration with our team, was convened in November 2020. The panel's recommendations, formulated as the Michigan Plan for Appropriate and Tailored Healthcare in Pregnancy, include specifications for visit frequency and the use of telemedicine based on patients' medical conditions, social and structural determinants of health, and preference.

We look forward to the emergence of further data on the relationship between new prenatal care models, patient experience, pregnancy outcomes, and resource utilization. This information will be crucial for developing detailed prenatal care protocols, not only for low-risk patients but also for those with medical and pregnancy conditions. ■

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## “Dr Isaac Schiff, Professor and Chair of the Vincent Department of Obstetrics and Gynecology at Massachusetts General Hospital/Harvard Medical School, reopened the Obstetrical Service closed during the Second World War”



**TO THE EDITORS:** Dr John Repke wrote to me on June 24, 2021, to indicate that the article titled “Giants in Obstetrics and Gynecology Series: a profile of Beryl Benacerraf, MD” contains an error on page 561.<sup>1</sup> The article stated that Dr Fredric Frigoletto Jr was Chair of the Department of Obstetrics and Gynecology at the Massachusetts General Hospital/Harvard Medical School. This is not accurate. The Chair of the Vincent Department of Obstetrics and Gynecology was Dr Isaac Schiff. Dr Schiff reopened the Obstetrical Service, which had been closed at the since the Second World War, and appointed Dr Frigoletto as the first stand-alone Chief of Obstetrics at the Massachusetts General Hospital. ■

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