Delivery Science Grants Program

A Prenatal Care Strategy that Included Telehealth had Similar Outcomes as In-Person Visits

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| Challenge | **Prenatal care visits are extremely common and direct important screening tests for pregnancy-related hypertension and diabetes. Telehealth may be a useful approach for these routine visits, but its impact on birth outcomes is unknown.** |
| Existing Evidence | Pregnant patients and their providers perceive the use of telemedicine as a positive experience, though its effectiveness for prenatal care outcomes is unknown, including its potential role for decreasing differences in accessing care by location, demographics, and socioeconomic status. |
| Target Population | Individuals pregnant during and before the COVID-19 pandemic |
| Intervention or Exposure | Visit type: office only, partial telehealth, full telehealth (pre-pandemic vs. increased telehealth during pandemic); and COVID infection from 30 days before conception to 7 days after delivery |
| **Outcomes/Key Findings** | A hybrid model of prenatal care using a combination of in-office and telemedicine visits is effective and could be used beyond the pandemic period. A higher (25%) proportion of prenatal visits from telemedicine intra-pandemic vs. 14% pre-pandemic provided similar comparable detection rates of gestational diabetes, preeclampsia, preterm birth and  NICU admission rates; no differences were seen between people of different race, ethnicity, or measures of neighborhood deprivation.  Pregnant individuals with SARS-CoV-2 infection had higher risk of severe maternal morbidity (HR 2.45, 95% CI:1.91, 3.14), preterm birth (<37 weeks; 2.07 [1.75, 2.46]) and venous thromboembolism (3.08 [1.09, 8.74]). |
| **Resulting Action/Change** | **These data support a next-step KPNC pilot of a nationally designed hybrid prenatal care model for lowrisk pregnancies.** |
| Additional Recommendations | Evaluating other pandemic-associated prenatal care changes, including decreased early-pregnancy screening for gestational diabetes and change from multimodal aneuploidy screening to cell-free DNA screening to inform their inform continuation of these novel care patterns. |
| Implementation Tools | Telemedicine contact, device, and screening protocols for prenatal care. |
| Implementation Measurement | Proportions of pregnancies using telemedicine or hybrid approaches; completion of recommended screenings; detection rates of gestational diabetes, pre-eclampsia, and diagnosed depression; differences by demographics and medical center |
| Reference | <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2807379>  A graph of diabetes and gestational diabetes  Description automatically generated |