

1 **The Association Between Race and Interventional Thresholds in Unplanned Cesarean**
2 **Deliveries**

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7 **Precis:** Racial disparities in timing, indications and complications exist in patients undergoing
8 unplanned cesarean deliveries

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24 **Abstract**

25 **Objective:** To examine the impact of race on timing, indications, and complications in
26 unplanned cesarean deliveries (CDs).

27 **Methods:** A retrospective study using electronic medical records of non-Hispanic Black (NHB)
28 and non-Hispanic White (NHW) primiparous individuals at term-gestation who underwent
29 singleton CD at a large academic medical institution from July 2017–June 2019 and July 2021–
30 June 2023. Unadjusted and adjusted group comparisons were performed.

31 **Results:** Compared to NHW patients (n=2,950), NHB patients (n =327) were younger (26 vs.
32 31 years), more likely to have public insurance (56% vs. 16%), chronic hypertension (12% vs
33 6%), labor induction/augmentation (72% vs. 65%), unplanned CD (87% vs. 77%), and CD for
34 non-reassuring fetal status (54% vs 32%) (all $p < 0.01$). NHB patients were less likely to undergo
35 CD for failure-to-progress (30% vs. 41%, $p < 0.01$). Among laboring patients with unplanned
36 CD (n=2,502), labor onset to active stage cesarean delivery start time was significantly shorter
37 for NHB patients, who were more likely to undergo CD in active phase (69% vs. 52%) and less
38 likely to undergo CD in the second stage (11% vs. 30%) compared to NHW patients (all $p < 0.05$).
39 First-stage labor was significantly longer for NHB patients (median 1,195 vs. 630 minutes,
40 $p < 0.01$). NHB patients had higher rates of chorioamnionitis (13% vs. 7%, $p < 0.01$) with no
41 differences in postpartum hemorrhage, DVT/PE, GU/GI injury, re-operation, readmissions,
42 neonatal 5-minute APGAR scores or NICU admissions.

43 **Conclusion:** Racial disparities exist in patients who labor and undergo CD. Determining
44 underlying causes may direct guidelines to improve Black maternal health.

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