

### RACE ADJUSTMENT IN CLINICAL ALGORITHMS

- Race often substituted for an observed difference seen between populations thought to be due to genetic or biologic difference
- Race is NOT a proxy for these differences
- Disparities seen in maternal health due to results from structural racism and its effects on social determinants of health

Cerdena et al Lancet 2020 Vyas DA, et al. N Engl J Med 2020.

## BACKGROUND

- As the number of repeat cesarean sections increased, vaginal birth after cesarean delivery was recommended
  - Reached a peak in 1998 32%

- Numbers have declined dramatically
  - Due to increase in uterine rupture
  - Concern about maternal and infant morbidity
    - Introduction of more stringent criteria for patients to undergo VBAC
    - More medicolegal pressures

### BACKGROUND CONTINUED

- 2004 publication of study comparing those undergoing TOLAC/VBAC to those undergoing planned repeat cesarean delivery
  - Found that TOLAC associated with greater perinatal risk than elective surgery
- 2007 predictive tool was created to assess chance of successful VBAC after TOLAC
  - Race correction was first included here
  - Suggested that successful VBAC associated with being young and white
    - Cited an evaluation of same population used for 2004 study
    - White race, private insurance and BMI <30 were referent groups
  - Racial category labels not well defined
    - Only a binary category of yes/no
    - No room for mixed race/ethnicity
- No plausible reason for inclusion of race as a factor being used in predictive model

Landon et al, NEJM 2004 Grobman et al, Obstetrics and Gynecology 2007 Vyas et al, Women's Health Issues 2019

# WHY INCLUDE RACE/ETHNICITY?

- Rooted in the erroneous belief that there existed "an ethnic variation in pelvic architecture" (Hollard et al, 2006)
  - Gynecoid pelvis is considered ideal for vaginal delivery
    - Non gynecoid pelvis associated with dystocia and other pelvic dysfunctions
  - Non white women have non gynecoid anatomy
    - Anthropoid pelvis narrower than gynecoid
    - Described as an "animalized arrangement" in "lower races" in 1886 (Turner)
- Historical context wanted "scientific" support for a racist hierarchy
- Race is more often a proxy for the effect of racism on income, access to education, health care

### BACKGROUND

- VBAC calculator validated in other populations without use of race/ethnicity
- 2021 same group published a tool to predict successful VBAC after TOLAC without race/ethnicity
  - Used the same study population
  - Added a different factor (treated chronic hypertension) to the tool

Vyas et al, Women's Health Issues 2020 Grobman et al, AJOG 2021

### IMPACT OF OLD VBAC CALCULATOR

- Higher rates of cesarean delivery in African-American and Hispanic women
  - Calculator factors decrease the chance of successful VBAC by half
  - Thereby making it less likely that TOLAC/VBAC is offered to these women
    - Exacerbating the disparity in maternal morbidity
  - Undermined informed consent
    - Used the calculator to discourage women from TOLAC
- Increased the number of birthing locations that would use the score from calculator to discourage TOLAC/VBAC

Rubashkin, AMA Journal of Ethics 2022

#### IMPACT OF THE NEW VBAC CALCULATOR

- Treats every prior cesarean as clinically necessary
  - Racism may explain why there are more unnecessary cesarean deliveries in Black and Hispanic women
  - Now adds more Black and Hispanic women into the VBAC prediction tool
- New indicator of chronic hypertension often shaped by structural racism
  - As is BMI
  - Disconnects the risk factors from structural forces and shifts responsibility onto the individual
  - Choice between TOLAC/VBAC vs repeat cesarean section no longer carries dual equipoise