Cardiovascular risk in Women from Pregnancy and Beyond

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Systemic Barriers to Pregnancy Care

Figure 3. Distribution of births, by principal source of payment for delivery and maternal age: United States, 2021

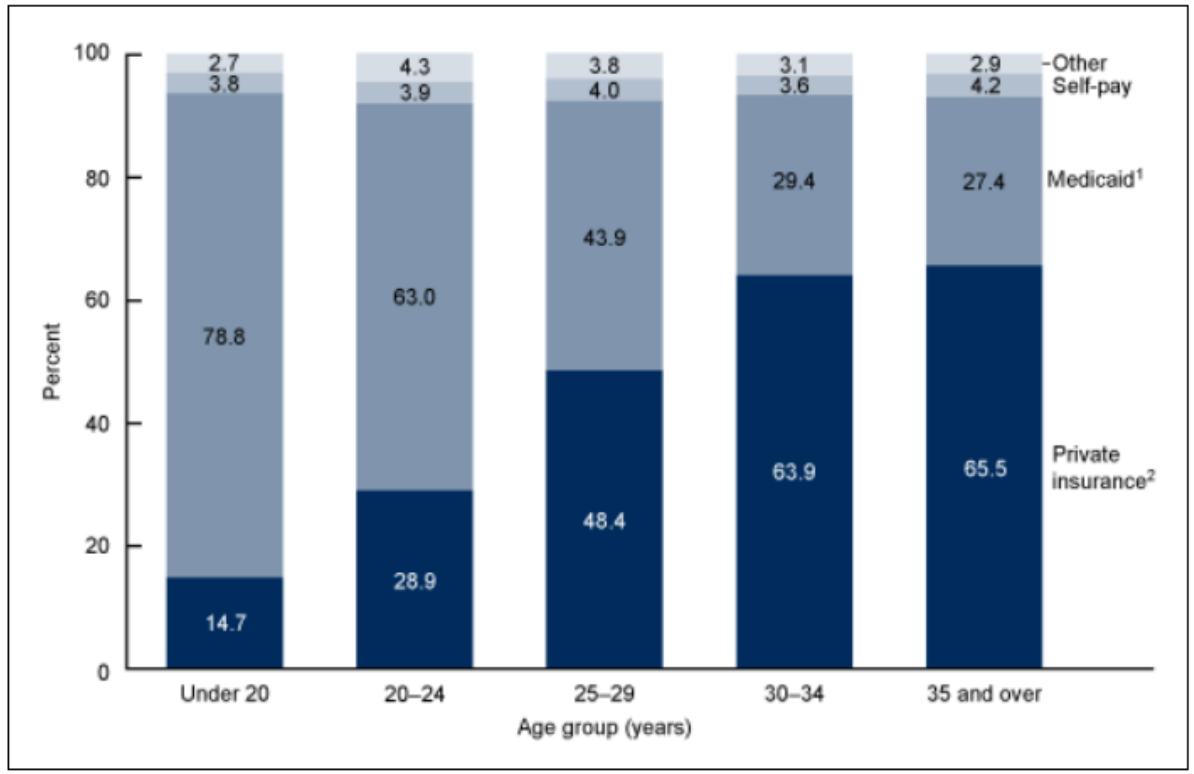
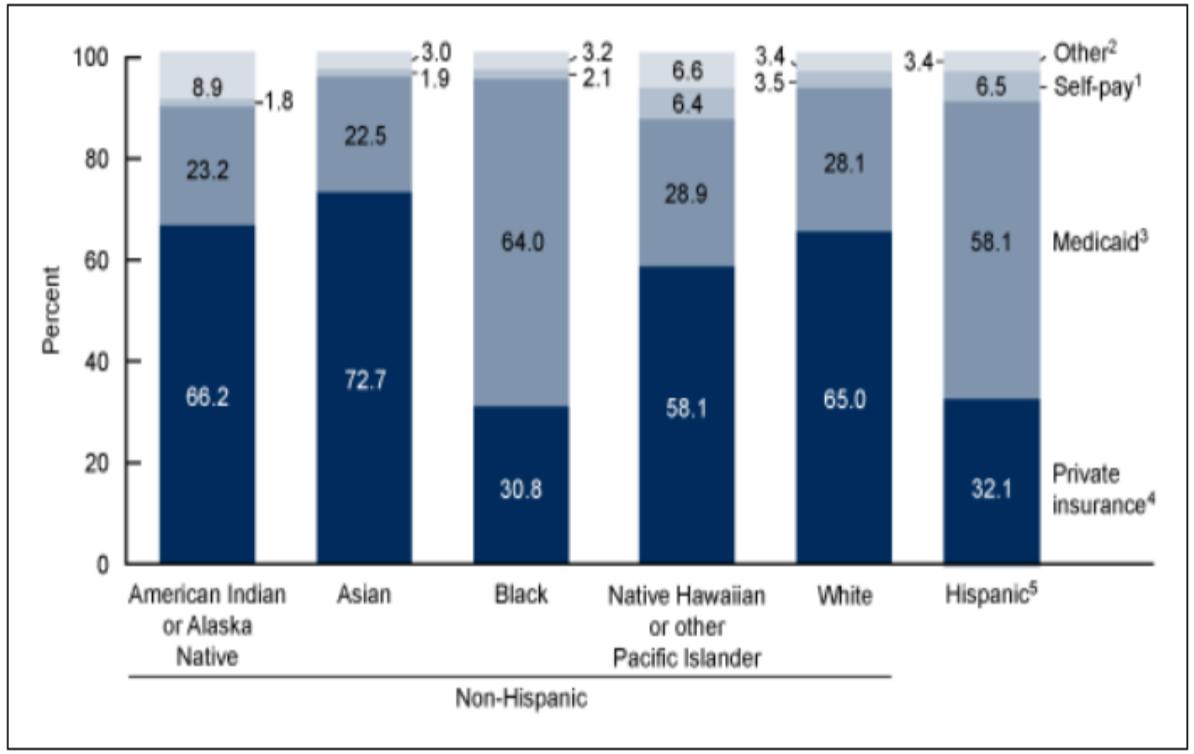


Figure 2. Distribution of births, by principal source of payment for delivery and maternal race and Hispanic origin: United States, 2021



SOURCE: National Center for Health Statistics, National Vital Statistics System, Natality data file.

Disparities in Maternal Outcomes

Compared with NHW, NHB women experience more preterm birth, HDP, and small for gestational age birth (12.2% vs. 8%, 16.7% vs. 13.4%, and 17.2% vs. 8.6%)

Black women have 2.9 higher pregnancy-related mortality (irrespective of urban/rural status, age and education)

Black women with gHTN have age-adjusted risk ratio for stroke of 2.07 compared to White women.

JACC Review Topic of the Week. J Am Coll Cardiol. 2022 Nov 1;80(18):1762-1771

Disparities in Maternal Outcomes

gDM is more prevalent in Hispanic women than NHW or NHB

The risk of HDP in Hispanics is less well known due to the heterogeneity of the population

The risk of severe maternal morbidity is 2x's higher in Hispanic than NHW women

Maternal mortality is lower in Hispanic than NHW women, despite higher rates of APOs

Paediatr Perinat Epidemiol 2015;29:436-43
Obstet Gynecol 2017;129:285-294
Circulation 2021;143;e902-e916

Health Care Systems

- Diversify the health care workforce
- Reframe health care delivery
- Enhance clinical trial representation
- Provide multidisciplinary, culturally tailored team-based care
- Partner with communities
- Enhance international research and public health collaborations

Clinicians

- Mitigate bias and discrimination
- Address psychosocial challenges
- Educate patients
- Assess social determinants of health

Systemic Barriers

Professional Societies

- Accountable health care leadership
- Standardize race/ethnicity terminology
- Advocate for policy changes
- Develop health equity guidelines and health equity curriculum
- Disseminate peer-reviewed evidence on health equity
- Incorporate health equity focus into continuing medical education programs

Government Agencies

- Consider health impact in all policies
- Incentivize/reimburse equitable health care
- Prioritize research training, career development, and capacity building

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CENTRAL ILLUSTRATION

Mediterranean Diet

- Greater concordance to MedDiet associated with:
  - 21% lower risk of any APO
  - 28% reduction in pre-E
- Improvement across race/ethnicity/geography
- Stronger association among older women

Original Investigation | Nutrition, Obesity, and Exercise

December 22, 2022

Association of a Mediterranean Diet Pattern With Adverse Pregnancy Outcomes Among US Women

Nour Makarem, PhD, MS[1]; Kristi Chau, MA[2]; Eliza C. Miller, MD, MS[2]; Cynthia Gyamfi-Bannerman, MD, MS[3]; Isabella Tous, BS[4]; Whitney Booker, MD[5]; Janet M. Catov, PhD, MS[6]; David M. Haas, MD, MS[7]; William A. Grobman, MD, MBA[8]; Lisa D. Levine, MD, MSCE[9]; Rebecca McNeil, PhD[10]; C. Noel Bairey Merz, MD[11]; Uma Reddy, MD, MPH[5]; Ronald J. Wapner, MD[5]; Melissa S. Wong, MD, MHDS[12]; Natalie A. Bello, MD, MPH[11]

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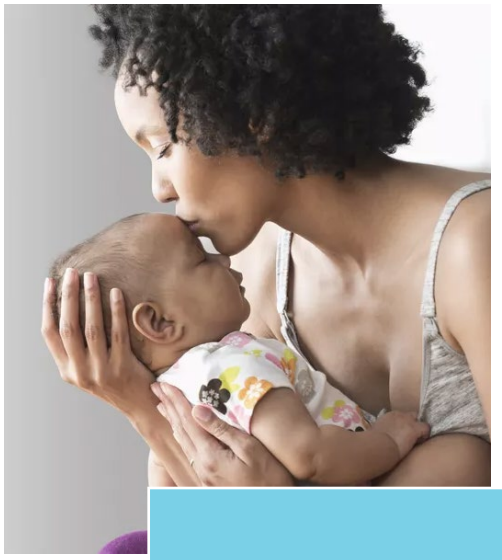
ASA for pre-E Prophylaxis

NICE Guidelines 2019

- with >1 moderate RF for PEC → 75mg-150mg ASA daily after 12wks
- with any high risk for PEC →75-150mg ASA daily

USPSTF Guidelines 2021

- ASA 81 mg/day after 12wks who are at high risk for preeclampsia (Grade B)
- ASA 81mg/day .. has ≥2 moderate RF recommended*
- Consider ASA 81mg/day .. has 1 moderate RF



Key Postpartum Management Goals

BP monitoring within 72hrs of delivery if HDP

Monitoring for signs/sxs of postpartum PEC or PPCM (+/- biomarkers)

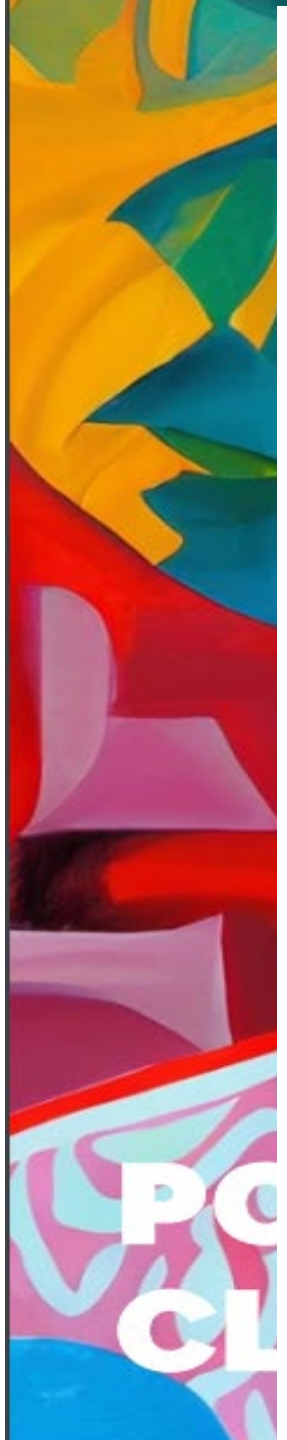
*Ambulatory blood pressure monitoring for med titration**

Patient education on future pregnancy risks and discussion on contraception/family planning (MFM)

Patient education of future CV risk

Consideration for ASA in subsequent pregnancy if APO or risk factors

Lifestyle counseling and referral to establish PCP care



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