

### 8. PREGNANCY-RELATED CVD RISK MANAGEMENT IN THE FIRST POSTPARTUM YEAR

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**Introduction:** Several pregnancy complications are linked to future risk of cardiovascular disease (CVD) and can inform CVD prevention. However, most primary care internists have low levels of comfort and experience with pregnancy-related health. In addition, the Internal Medicine literature lacks comprehensive practical guidance for primary care clinicians (PCCs) regarding pregnancy-related CVD risk management.

**Methods:** We systematically searched 3 databases (PubMed, EMBASE, and CINAHL) and manually searched clinical websites (Guideline Central, ACOG, USPSTF, AAFP, ACP, SGIM, ADA, and AHA/ACC), Google, and Google Scholar for guidelines related to postpartum care in the United States from 2010 to 2020. Two authors independently conducted title and abstract screening followed by full text review for guidelines or society recommendations relevant to pregnancy-related CVD risk assessment or management by PCCs in the year after pregnancy. A third author resolved discrepancies.

Results: Of 972 unique publications, 12 met inclusion criteria, representing a range of clinical specialties. None was written specifically for Internal Medicine-trained PCCs. Several recommended comprehensive CVD risk assessment within 3 months postpartum for any patient with a "pregnancy-related CVD risk indicator," followed by lifestyle counseling or pharmacotherapy and follow-up within 1 year postpartum. Additional screening and follow-up in the first postpartum year were recommended for patients with prior hypertensive disorders of pregnancy or gestational diabetes. Most recommendations were based on limited or inconsistent evidence, consensus or expert opinion, or were ungraded. Several areas of uncertainty for future research were identified, including CVD risk assessment that incorporates pregnancy complications, and the optimal timing and content of ongoing CVD risk assessments.

**Conclusions:** Clinical practice recommendations for the identification and management of pregnancy-related CVD risk by PCCs during the first postpartum year are scattered and generally based on unclear or weak evidence. Clear and comprehensive guidance is urgently needed to enable PCCs to address CVD risk after medically complicated pregnancies.









# 20. FULFILLING AN UNMET NEED: INTEGRATING FAMILY PLANNING SERVICES INTO OFFICE BASED ADDICTION THERAPY

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**Introduction:** Women with opioid use disorder (OUD) have unique concerns related to reproductive health. Previous studies have found that women with OUD reported unintended pregnancies at two to three times the rate of the general population, suggesting unmet reproductive healthcare needs. Given the structure of office-based addiction treatment (OBAT) programs in which patients present at frequent intervals to a health care provider, there is an opportunity to address these disparities. This qualitative study aims to investigate the feasibility of and barriers to integrating family planning (FP) services into OBAT from the perspective of clinicians specializing in treatment of OUD.

**Methods:** After obtaining IRB approval, we conducted semi-structured interviews with clinicians to better understand the unique strengths and barriers of providing FP services within OBAT clinics. Interviews were recorded, transcribed, and analyzed using a codebook based on the Promoting Action on Research Implementation (PARiHS) and Ottawa Decision Support frameworks.

**Results:** Participant interviews (n=19) highlighted several key themes: 1) high relevance of FP counseling to the holistic care offered in OBAT clinics; 2) tension felt by patients and clinicians when considering outcomes of an unplanned pregnancy on recovery: concern about the destabilizing influence of an unplanned pregnancy versus the potentially motivating effect of parenthood; 3) complexity of including nuanced FP counseling into OBAT visits including need for additional education to provide effective patient-centered contraceptive counseling; 4) logistics of providing timely access to contraception requiring procedures; 5) conflicting priorities between ensuring patients have a contraceptive plan and concern for potential reproductive coercion.

**Conclusions:** OBAT programs involve regular visits with consistent and trusted clinical teams, making them an optimal setting to provide high-quality FP care to women with OUD. Implementation will require thoughtful planning and incorporate clinical education, logistics, and broad engagement of clinical teams to effectively meet the reproductive health needs of patients with OUD.









### 28. E-CIGARETTES AND THEIR IMPACT ON PERIODONTAL HEALTH: A SYSTEMATIC REVIEW

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**Introduction:** As of June 2020, numerous states in United States have passed law supporting unrestricted use of electronic cigarettes indoors thus increasing sales by 300% in past 4 years. This has led to unhindered and unrestricted consumption amongst young adults leading to development of unhealthy habits impacting general and oral health. The objective of this systematic review is to explore the evidence related to the relationship between electronic cigarettes (EC) and periodontal health.

**Methods:** PubMed, Scopus, Google-Scholar, Cochrane Library, Embase, and Ovid MEDLINE were searched using various combinations of the keywords. Twelve studies were included. Six studies were clinical, and six studies were performed in-vitro.

**Results:** In 2 studies, EC smokers had 0.4-1mm increased probing depths compared to non-smokers. In other 2 studies, when the subjects switched from combustible tobacco to vaping thus decreasing their nicotine content, they found increase in bleeding sites but less plaque accumulation. In one study, bone levels, probing depths, levels of salivary IL6, IL2 and cotinine levels were similar between EC users and non-smokers. However, the invitro studies reported increase proinflammatory cytokine release, DNA damage in human gingival fibroblasts. When the cells were exposed to nicotine levels for over 48 hours, altered cellular activity, inhibition of type 1 collagen release, decreased cellular migration and increased lactose dehydrogenase activity were noted. An interesting finding derived from this study is association between certain flavors and their effects on the fibroblasts. While flavors such as hazelnut and lime did not exert any negatives effects, menthol severely affected cell vitality and proliferation.

**Conclusions:** E cigarettes are less harmful alternative to tobacco smoking however, they do exert a negative impact on the periodontal health. There is a need for more standardized randomized controlled clinical trials and/or prospective cohort studies that assesses the impact of exclusive e-cigarette users on their periodontium.









# 5. RACIAL DISPARITIES IN LIFETIME ACROSS MEDICATIONS FOR OPIOID USE DISORDER AMONG HOSPITALIZED PERSONS WHO USE OPIOIDS

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**Introduction:** Historically, receipt of medications for OUD (MOUD) has been influenced by a number of social factors, including structural racism within the healthcare system. Hospitalizations for opioid related complications have increased in the U.S. and can serve as an opportunity to decrease disparities to treatment access. We investigated the association between lifetime access to MOUD and race/ethnicity among a cohort of hospitalized persons.

**Methods:** We conducted a cross-sectional analysis of hospitalized patients who misuse opioids. The primary outcome was lifetime access to MOUD defined as ever prescribed buprenorphine or methadone. We assessed three race/ethnicity groups: 1) white, non-Latinx (white), 2) non-white, non-Latinx (non-white), and 3) Latinx. The non-white group comprised of 50 African-American, 7 mixed race, and 10 identifying as other. Individuals in the Latinx group were coded irrespective of racial identification. We used multivariable logistic regression to estimate the odds of lifetime receipt of MOUD, adjusting for age, gender, history of incarceration, homelessness, unemployment, and a standardized measure assessing trust in the medical profession.

**Results:** We included 252 participants: n=145 white, n=67 non-white, n=40 Latinx. Non-white and Latinx individuals had lower proportions of lifetime access to MOUD than whites (59.7%, 70%, 77%, respectively). After adjusting for background characteristics and trust in the medical profession, the likelihood of prior MOUD treatment was significantly lower for non-white (adjusted odds ratio (aOR) = 0.15, 95%CI 0.06-0.35, p < 0.001) and Latinx participants (aOR = 0.40, 95%CI 0.16-0.98, p = 0.045) compared to white participants. Latinx participants had higher odds of ever receiving MOUD than non-white participants (aOR 2.71, 95%CI 1.05-7.01, p = 0.040).

**Conclusions:** Significant disparities exist among white, non-white and Latinx individuals regarding lifetime access to MOUD. Hospitalization may be an opportunity to address structural racism by referring racially/ethnically diverse patients to MOUD treatment.





