Racial Disparities Persist in Cancer Screening: New USPSTF Colorectal Cancer Screening Guidelines Illuminate Inadequate Breast Cancer Screening Guidelines for Black Women

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The United States Preventative Services Task Force (USPSTF) recently released updated colorectal cancer screening guidelines. In addition to maintaining the prior grade A recommendation to screen those ages 50–75, they added a grade B recommendation to offer screening to those ages 45–49. This addresses the rising incidence of colorectal cancer in younger patients, who tend to present with more advanced disease compared to older patients. However, the guidelines fail to make specific recommendations for Black patients, emphasizing the enduring racial inequities inherent in USPSTF cancer screening guidelines, including the current breast cancer screening guidelines.

Without clear guidelines to address the critical cancer screening needs of Black patients, the responsibility to appreciate and address these specific needs continues to fall solely on primary care clinicians. This is problematic, as numerous studies demonstrate that most health care providers have implicit racial and ethnic biases, and notably negative attitudes toward Black patients and other minorities of color. Furthermore, these biases are associated with negative patient-provider interactions, treatment recommendations, treatment adherence, and health outcomes¹. Although the use of race, an imprecise social construct without genetic basis, as a health determinant is a complex and contentious issue, its application to cancer disparities remains necessary, at least until more precise social variables are defined to capture health disparities. Thus, guidelines from the USPSTF must address race-based cancer disparities to lessen the burden of individual patient and physician responsibility, and to mitigate the effects of individual bias and racism.

Colorectal cancer is one of multiple malignancies with significant race-based diagnosis and treatment disparities. Black Americans have the highest colorectal cancer incidence and mortality compared to other races. According to the National Cancer Institute's Surveillance, Epidemiology, and End Results statistics, Black Americans have colon cancer incidence rates 15% higher and mortality rates 32% higher than white Americans. These disparities are primarily due to structural racism and the resulting inequities in access to and quality of screening and diagnostics, with genetic factors playing an insignificant role. Although colorectal cancer is most frequently diagnosed in people ages 65–74, the incidence has markedly increased among those under 50, who now comprise 10.5% of new cases. Until recently, Black Americans had higher incidence rates across all age groups compared to whites². However, the recent trend of increasing colorectal cancer incidence in those under 50 is primarily driven by rising incidence in young white patients, while rates in young Black patients are relatively stable. Twenty-five years ago, incidence rates were 40% higher for Black Americans ages 20–49 compared to their white counterparts, but the rates are now similar².

Black patients should begin colorectal cancer screening at age 45, as recommended by the American College of Gastroenterology since 2005³ and endorsed by the US Multi-Society Task Force on Colorectal Cancer since 2017⁴. Now, with robust data demonstrating rising colorectal cancer incidence under age 50, predominantly among white patients, the USPSTF has finally recommended offering colorectal cancer screening (a grade B recommendation) to all patients ages 45–49, across all races. Although the recent USPSTF statement acknowledges the higher colorectal cancer incidence and mortality among Blacks Americans, it fails to make specific, strong screening recommendation for Blacks patients, citing a lack of empirical screening data specific to the Black population. Instead, the USPSTF continues to place significant responsibility for assessing and addressing the unique screening needs of the Black population on clinicians. The longstanding racial inequities in colorectal screening

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guidelines mirror those of the current USPSTF breast cancer screening guidelines.

Since the implementation of screening mammography in the USA, the standard of care has been to initiate annual screening mammography for the general population at age 40. The incidence of breast cancer rises sharply at 40, and steadily increases thereafter. Breast cancer diagnosed in women ages 40–49 accounts for approximately 14% of total diagnoses, 14% of invasive cancers, 8% of breast cancer deaths, and 30% of life years lost to breast cancer⁵. Data from randomized controlled trials as well as observational studies demonstrate mortality benefits of initiating mammographic screening at age 40, and the US data-based Cancer Intervention and Surveillance Modeling Network models (which heavily inform the USPSTF) consistently demonstrate greater mortality reduction starting at 40 compared to 50. Both the American College of Radiology and the American Society of Breast Surgeons continue to recommend annual screening mammography beginning at age 40, while the American Cancer Society recommends initiating screening for all women by age 45, with the option to start between ages 40 and 44. However, in 2009, the USPSTF issued a specific recommendation against screening women 40–49 years of age. Under the current guidelines, the USPSTF offers biannual screening for women ages 40–49 as a grade C recommendation, in cases where screening benefits outweigh the harms, emphasizing that screening mammography in this age group leads to unnecessary biopsies, overdiagnosis, and patient anxiety.

While delaying screening mammography until age 50 markedly increases breast cancer-specific mortality across races⁶, this USPSTF guideline increases racial disparities in breast cancer diagnosis and survival, causing greatest harm to Black women. Though Black women have historically had slightly lower incidence rates of breast cancer compared to white women, rates have recently stabilized in white women and increased in Black women, and are now nearly equivalent⁵. Breast cancer incidence rates are higher among Black women under age 45 compared to white women, and the median age at diagnosis is four years younger for Black women⁷.

In addition to developing breast cancer at younger ages, Black women face far worse prognoses compared to white women. Recent data from the American Cancer Society indicates that the breast cancer mortality disparity between the two races continues to widen, with a 41% higher mortality rate among Black women compared to white women. This marked disparity is primarily due to the effects of structural racism, limiting Black women's access to timely, high-quality diagnosis and effective treatment. Compared to their white peers, Black women are diagnosed at more advanced disease stages, are less likely to receive stage-appropriate treatment^{7–9}, and have lower survival rates at every disease stage^{7–9}. In addition,

although Black women face higher breast cancer mortality, they are drastically underrepresented in clinical trials.

Also contributing to the relatively worse prognosis of Black breast cancer patients is their predisposition to breast malignancies with aggressive tumor biology. For example, 21% of breast cancers in Black women are triple negative (negative for the estrogen receptor, progesterone receptor, and human epidermal growth factor receptor), compared to approximately half that percentage in white women⁵. Triple negative cancers carry a significantly worse prognosis than other histologic subtypes, partly due to a lack of effective targeted therapies.

USPSTF guidelines fail to address the high-risk status of Black women, and to protect their need for annual screening beginning at age 40. The 2021 Consolidated Appropriations Act temporarily extended insurance coverage of screening mammography for women over 40 until December 31, 2022. However, it is critical that future USPSTF breast cancer screening guidelines finally address the screening needs of Black women, both to maintain insurance coverage and to guide the medical community. While studies on the clinical impact of the 2009 USPSTF recommendation against screening mammography for those ages 40–49 show variable results among subpopulations, multiple studies demonstrate that primary care providers are heavily reliant on USPSFP breast cancer screening guidelines¹⁰, and were less likely to recommend screening mammography for this age group following the 2009 USPSTF guideline¹¹. Research also demonstrated a small reduction in screening rates among those 40–49 after the 2009 USPSTF revision, and a larger reduction among women at the younger end of that age group¹². A recommendation to screen Black women beginning at age 40 would likely have a substantial clinical impact, as recent studies demonstrate greater adherence to cancer screening guidelines, including screening mammography, among Black women compared to white women^{13,14}.

Early in 2020, the USPSTF committed to improved identification of the contributions of systemic racism on health inequities, and to update guidelines to reverse the negative effects of systemic racism on health¹⁵. But the recent USPSTF colorectal cancer screening guidelines still fall short of this obligation, failing to make specific recommendations for Black patients. As physicians, we hope that future USPSTF breast cancer guidelines will support screening all women in their forties. But more importantly, we advocate for the acknowledgement of the specific high-risk status of Black women, and the critical screening guidelines that must accompany that status. Without such guidelines, the full burden of identifying and meeting the breast cancer screening needs of Black women falls solely on clinicians, and we are falling short of this imperative.

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