

Challenges and Solutions to Colorectal Cancer Disparities in the U.S.

Elena Martinez, Ph.D.
Epidemiologist

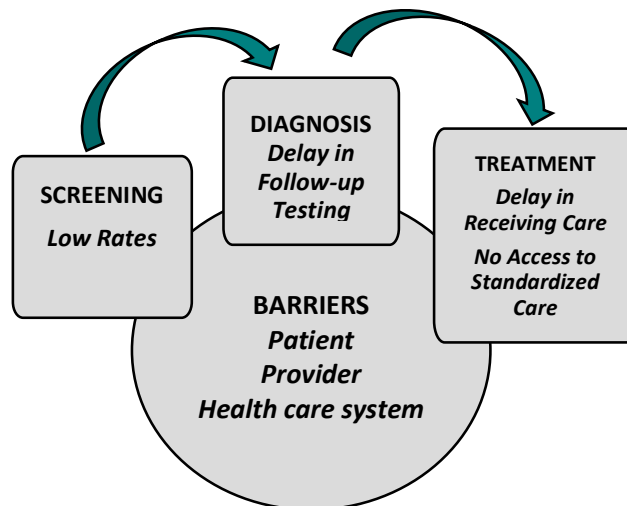
Cancer Registry of San Diego and Imperial Counties and the
Orange County Cancer Registry

Colorectal cancer (CRC) disparities in the U.S. are evident throughout the cancer care continuum. Although CRC incidence and mortality rates continue to decline, the latest U.S. data show that overall, black men continue to have the highest rates. Furthermore, there are clear stage-specific survival differences across racial/ethnic groups. Perhaps less studied is the unequal burden of CRC by socioeconomic status. Published reports clearly show that even within racial/ethnic group, individuals with lower education have higher death rates than those with higher education. It has been also shown that uninsured patients have both a higher probability of being diagnosed with late stage disease and lower survival than insured individuals.

Reasons for the unequal burden of disease across racial/ethnic groups and socioeconomic status are complex and multifactorial. CRC screening has been shown to decrease risk of dying from this disease. However, in spite of this evidence, screening uptake continues to be relatively low, especially among underserved populations. This year, Gupta and Martinez published a commentary in the *Journal of the National Cancer Institute*¹, where they outline key CRC screening disparities among the underserved. Based on their review, extremely low screening uptake (~20%) was shown among the uninsured and recent immigrants to the U.S. Rates were also low (<50%) among Hispanics, Asians, as well as individuals with lower education and lower income. The authors outline key challenges to CRC screening in these populations and provide promising approaches to increasing screening among the underserved.

Additional contributors to the higher CRC mortality rate and poorer survival among blacks might relate to black-white treatment disparities. In a second manuscript from the UC San Diego group², investigators used SEER-Medicare linked data to assess black-white differences for metastatic CRC in patient consultation with cancer specialists and analyzed the impact of treatment disparity on survival. Results showed significant lower rates of consultation with surgery, medical oncology, and radiation oncology in black vs. white patients. Findings also showed significant survival differences between blacks and whites; however, after adjustment for treatment, these differences disappeared, suggesting that the inferior survival for black patients with metastatic CRC might be due to treatment disparities.

Population-based cancer registry data clearly show continued substantial CRC disparities in the U.S. Barriers to timely CRC screening, diagnostic resolution, and treatment initiation are complex, multi-factorial and include patient, provider, and system factors (Figure). Much more needs to be done to apply guideline-appropriate care among underserved populations in order to reduce and ultimately eliminate CRC disparities. Multilevel approaches need to target specific underserved populations taking into account known patient, provider, and system barriers. Finally, although still in the early stages, mandates in the Affordable Care Act are expected to substantially decrease disparities in CRC screening and access to treatment, facilitating the implementation of guideline-appropriate care and truly reducing and ultimately eliminating CRC disparities. Assessing the impact of these mandates will be an important future endeavor.



References

1. Simpson DR, Martínez ME, Gupta S, Hattangadi-Gluth J, Mell LK, Heestand G, Fanta P, Ramamoorthy S, Le QT, Murphy JD. Racial disparity in consultation, treatment, and the impact on survival in metastatic colorectal cancer. *J Natl Cancer Inst.* 2013 Dec 4;105(23):1814-20.
2. Gupta S, Sussman DA, Doubeni CA, Anderson DS, Day L, Deshpande AR, Elmunzer BJ, Laiyemo AO, Mendez J, Somsouk M, Allison J, Bhuket T, Geng Z, Green BB, Itzkowitz SH, Martinez ME. Challenges and possible solutions to colorectal cancer screening for the underserved. *J Natl Cancer Inst.* 2014 Apr;106(4):dju032.